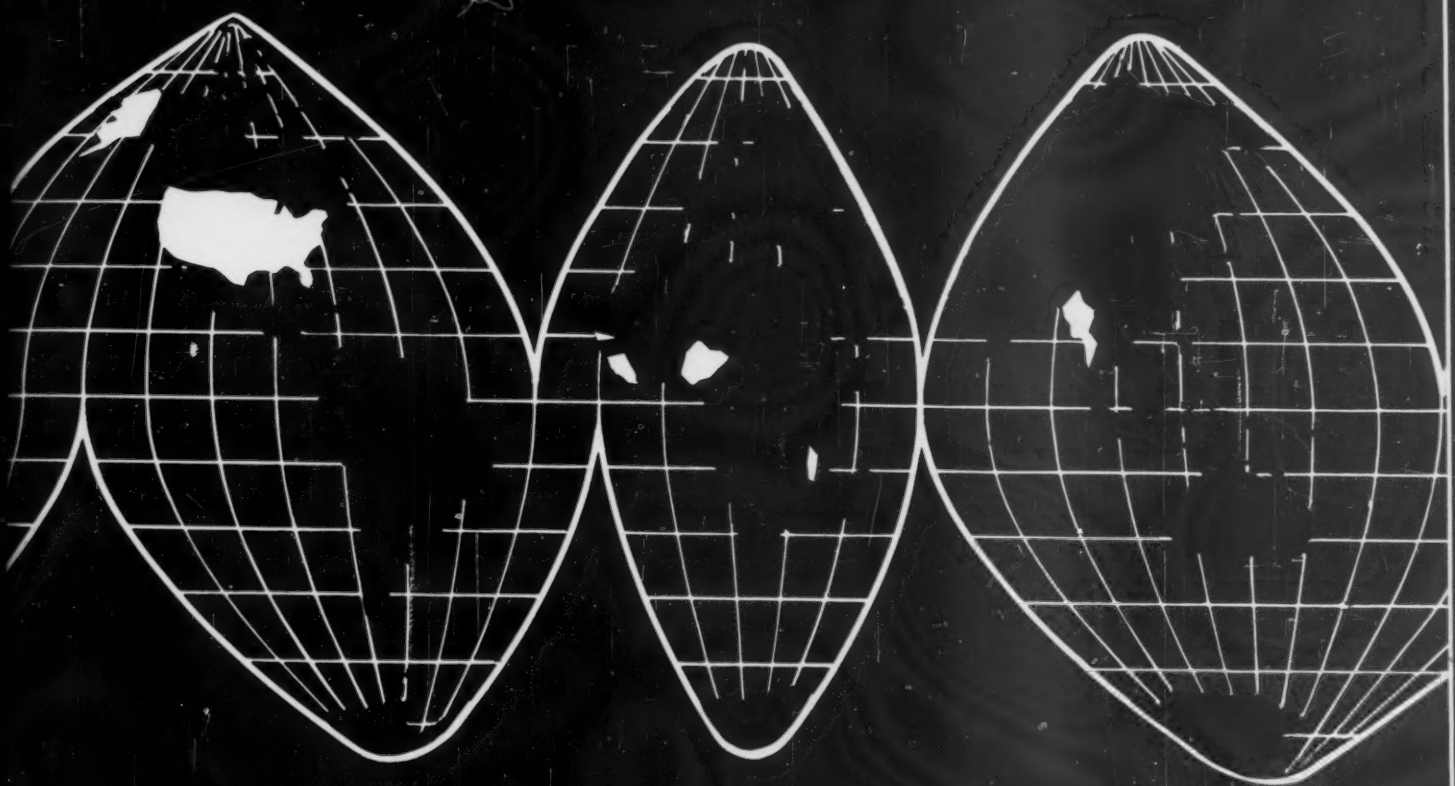
A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

Incorporating *International Commerce*

OCTOBER 19, 1970

Commerce Today

Coming Developments in Business and Technology



It's A Metric World

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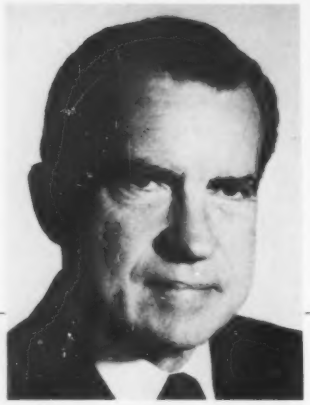

THE WHITE HOUSE

WASHINGTON

COMMERCE TODAY provides a welcome new medium of communication between government and the business community.

The Department of Commerce, with its profound interest in the nation's economic and technological progress, is aware of the many diverse problems that face U.S. business and industry, and the opportunities that can come from surmounting them.

It must also provide the businessman information on a variety of current issues ranging from international trade and domestic economic development to the nation's industrial pollution problems.

The businessman has a vital stake in overseas investment, consumer problems, product standards, telecommunications, travel, the inventive genius of the nation as represented by patent applications, and the many other areas in which the Department of Commerce is concerned. It is important that he know what his government is doing to benefit him.

This new magazine should provide a major avenue of communication in these areas. I warmly commend the Department on the inauguration of this new publication, which should shorten the distance between business and government.

Richard Nixon

Commerce Today

Incorporating *International Commerce*

Vol. I, No. 1, October 19, 1970

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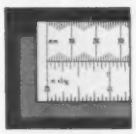

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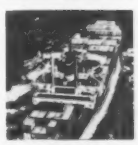

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FROM THE SECRETARY

Introducing *Commerce Today*— A New Service For U.S. Business

As one of my first discoveries upon becoming Secretary of Commerce, I learned that the Department of Commerce issues some 4,000 publications a year.

Many of these are essential (and sometimes the only) end products of complex, far-ranging programs, carried on by the many diversified agencies of the most "conglomerate" department in the Federal Government. All are designed to help Commerce carry out its mission to foster, serve and promote the nation's economic development and its technological advancement on a broad front of interests.

But until now the Department has not had a single publication to give the general public, the business world or the scientific community a panoramic view, across the board, of what is being done and what is coming from all of the 20 different agencies in international trade, economic development, technology and the business services.

We are launching *Commerce Today* as an effort to compress between a single set of covers, on a regular basis, the highlights and the details of the news and information which it is our responsibility to disseminate.

We regard *Commerce Today* as an exciting step in our continuing effort to improve communications with all of those we seek to serve—in business, commerce, science, education, the press and elsewhere. *Commerce Today* will be forward-looking exclusively. It is designed to tell our many constituencies of what lies ahead, what is being planned and developed, to serve them better.

In these pages in the months ahead we will discuss forward-looking policy developments and program progress in such matters as—

—the metric system

A New Biweekly

News	***Domestic Business***
Features	***Science and Technology***
Service Departments	***International Commerce***

—the new maritime fleet
—international trade policies
—new census data
—foreign investment programs
—regional economic development
—weather control
—global travel programs
—and minority business.

In short, *Commerce Today*, as a biweekly magazine of news, feature articles and service departments, will look ahead in everything from world trade to hurricane seeding to an international patent system.

For the press, we hope this new publishing venture will serve as an added source of information and background. We invite the use of all material that will appear in *Commerce Today*, with or without attribution, whenever the media may be interested in doing so.

With this first issue of *Commerce Today*, we bid a proud farewell to *International Commerce*, a journal which has served both the Department and American exporters well for many, many years. But in fact, *International Commerce* is neither gone nor forgotten. It is merely incorporated into this newer publication, which will continue to serve all of those with an interest in expanding U.S. business abroad.

America's basic strength stems from its competitive enterprise system. The Department of Commerce is not simply a voice of business in Washington or the voice of Washington in business, but instead is committed to serve as the spokesman and the advocate of the American enterprise system. That is our guiding principle, whether we deal with matters of trade, technology or travel—and *Commerce Today* is dedicated to that same purpose.

Maurice H. Stans

ECONOMIC
HIGHLIGHTS

U.S. Business Stalled By Automobile Walkout After Showing Solid Indications Of Upswing

Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page). Prior to joining the Department of Commerce in October 1969, Dr. Passer was with Eastman Kodak Company for 17 years.

The road to economic recovery has been blocked temporarily by the labor dispute in the automobile industry. The walkout at General Motors and its secondary consequences mean that no substantial advance in total business activity will take place until the automobile dispute is settled.

Evidence had become available that—before the strike began in mid-September—the economy was once again moving on an upward course. Real gross national product recorded a moderate gain for the July-September quarter. Probably the best evidence of prospects for renewed growth, however, is found in the recent behavior of the leading business indicators.

These early-moving series declined slightly in August, after moving up strongly around mid-year. Since the August drop in the composite leading index was only 0.3 percent, it did not alter the basic pattern of recovery that has been under way since last spring. Seven of the eight leaders available for August have improved since May, providing strong evidence that a general upward movement in the economy is in progress.

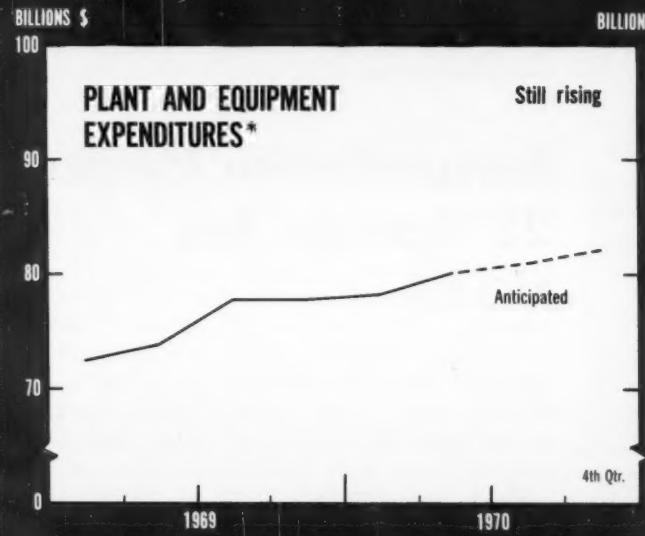
Retail sales were virtually unchanged in August, following a significant advance in July. Nondurable goods sales were stable, while sales of durable goods other than automobiles increased. Car sales dropped in August, probably due to much less aggressive selling efforts on the part of dealers who anticipated a strike against one of the major automobile producers and were willing to let their inventories accumulate.

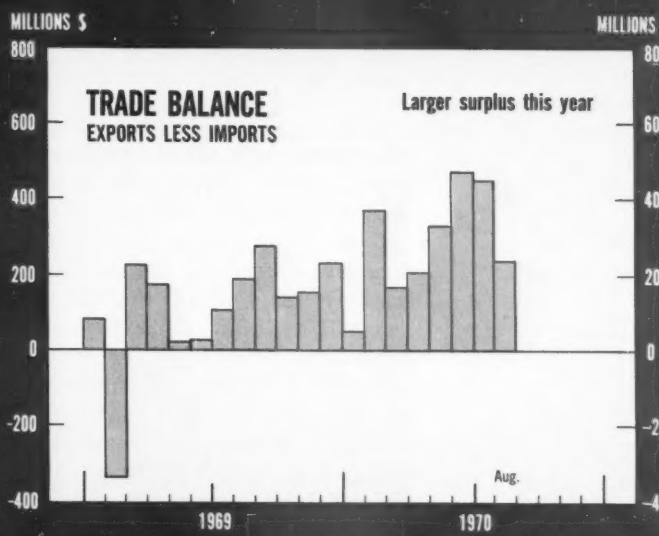
Among the factors of strength in the economy this year has been business spending for plant and equipment; it has continued to increase despite the economic slowdown in the first half of the year. The latest survey indicates a continuation of the rising trend.

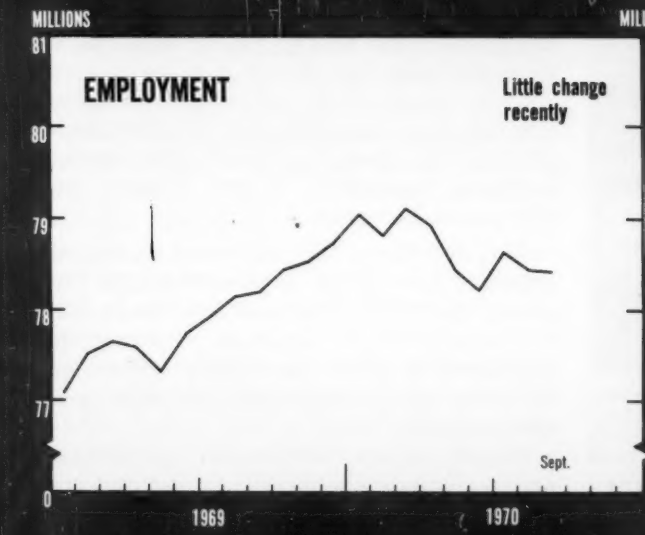
The U.S. merchandise trade balance declined in August from the unusually high June-July level. This decline resulted from the combination of a rise in imports and a fall in exports. Exports remained above the 1970 monthly average, however, and prospects are good for a trade surplus of $3 billion or more for the year. This would be a substantial improvement over the $0.8 billion surplus in 1968 and the $1.3 billion surplus in 1969.

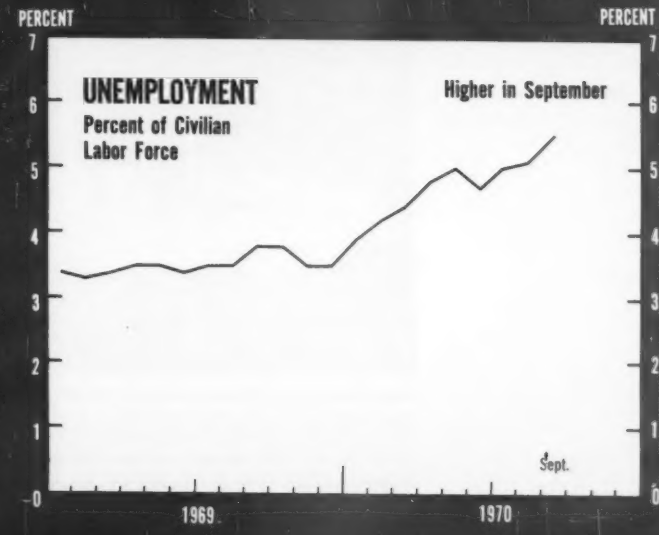
Employment showed little change in September, but unemployment advanced from 5.1 to 5.5 percent. Part of this increase in unemployment appears to have been a statistical aberration, arising from an unusually early employment survey. Because the survey came early in the month, a large number of students who had not yet returned to school were counted as unemployed.

Latest Indicators









All data seasonally adjusted.
*Annual rates.

Commerce Attacks Environmental Problems

DATA BUOY—*The first super navigational sea buoy, equipped with an oceanographic and meteorological data system, has been in operation off the New Jersey coast since 1967 as part of the National Data Buoy Development Project. A system of automatic ocean buoys such as this one for obtaining continuous marine environmental data is being developed to work closely with satellite and sensor operations.*

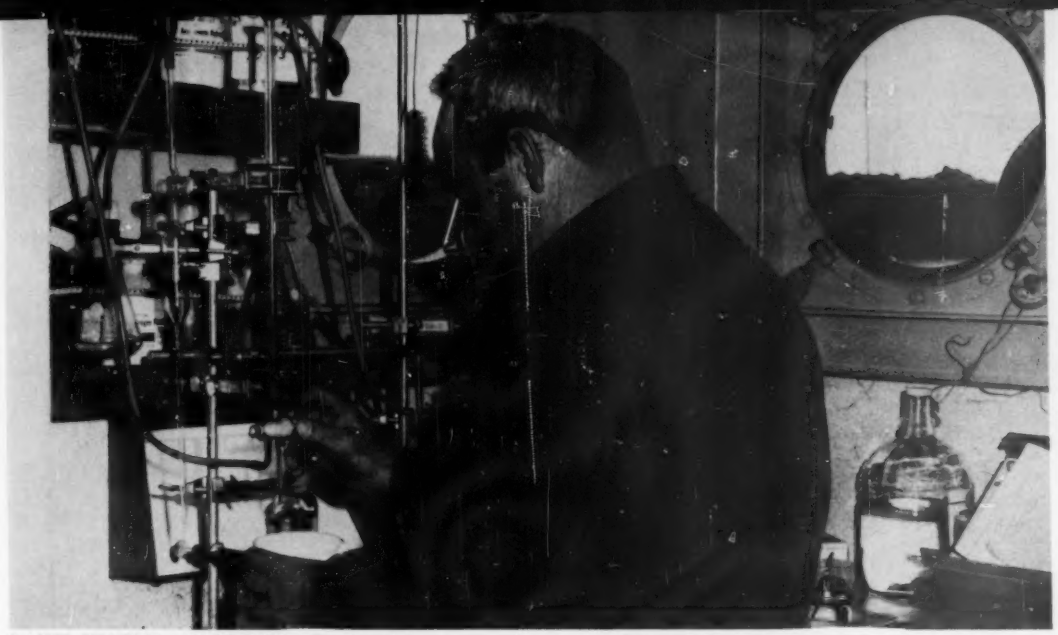
Reorganization Merges 23 Agencies Into NOAA

As an essential part of President Nixon's massive attack on the nation's environmental problems, the chief executive has assigned the Department of Commerce the task of finding solutions to these mounting issues.

In carrying out this mission, a National Oceanic and Atmospheric Administration (NOAA) has been established within the department to combine several Federal environmental programs.

"The Government's environmentally-related activities have grown up piecemeal over the years," President Nixon said in a reorganization message to the Congress proposing the establishment of the new agency. "The time has come to organize them rationally and systematically."

Biggest agency incorporated into NOAA was the Environmental Science Services Administration which comprised the Weather Bureau, Coast and Geodetic Survey, Envir-



LAKE WATER ANALYSIS—*In the laboratory of the research vessel Shenehon, operated by NOAA's Lake Survey Center, a technician analyzes the chloride content of a lake water sample. This is part of the National Ocean Survey, one of whose jobs is to map and chart U.S. coastal waters, the Great Lakes, the New York State Barge Canal System, Lake Champlain, and the Minnesota-Ontario Border Lakes.*

onmental Data Service, National Environmental Satellite Center and Research Laboratories. ESSA had been a part of Commerce since its creation five years ago.

In addition to ESSA, NOAA is made up of the Interior Department's Bureau of Commercial Fisheries, Marine Game Fish Research Program, and Marine Minerals Technology Center; the Navy-administered National Oceanographic Data Center and National Oceanographic Instrumentation Center; the Coast Guard's National Data Buoy Development Project; the National Science Foundation's National Sea Grant Program; and elements of the Army Corps of Engineers' U.S. Lake Survey.

Secretary Stans said of the new agency that it "marks a significant consolidation of research, exploration, development, conservation, monitoring and educational activities as they relate to the oceans and atmosphere. The intelligent use of the oceans, which constitutes three-fourths of the entire earth's surface, is vital if we are to strike a proper balance between development and conservation of its vast but surely not unlimited resources.

"Instead of 23 departments and agencies of government competing for various parts of the Federal mission in the ocean and the atmosphere," he added, "we will now have a single agency providing a unified national thrust in delivering on both the promise and potential of this last great frontier on earth."

Functions combined in the new agency are being reshaped to meet NOAA's broad objectives. The interim organization includes: the National Ocean Survey, combining the activities of ESSA's Coast and Geodetic Survey and the U.S. Lake Survey; the National Weather Service, formerly ESSA's Weather Bureau; the National Marine Fisheries Service, composed of the Bureau of Commercial Fisheries and Marine Game Fish Research Program; the National Environmental Satellite Service, formerly ESSA's National Environmental Satellite Center; the Environmental Research Laboratories, formerly ESSA's Research Laboratories; and the Environmental Data Service, combining ESSA's Environmental Data Service and the National Oceanographic Data Center.

Program Basis

In addition, the Office of Sea Grant administers and directs the National Sea Grant Program, and the National Oceanographic Instrumentation Center, Marine Minerals Technology Center, and Data Buoy Project Office are attached to the office of the Assistant Administrator for Environmental Systems.

NOAA is being organized on a program basis in order to utilize its resources in a comprehensive and balanced manner. Its main thrust will be:

- Mapping and charting the world's oceans and the Great Lakes;
- Fish exploration and conservation, aqua-

culture development, marine biological research, fish technology, and industry services;

- Technology for the air and sea, including data buoy and instrumentation activities;
- The monitoring of the geophysical environment, including global pollution, seismicity, climate and the earth's magnetic and gravity fields.
- The acquisition, processing, and dissemination of environmental data;
- The monitoring and prediction of atmospheric, hydrologic, oceanic, and solar conditions, and timely warning of related environmental hazards.

NOAA is expected to provide the following benefits:

- The combined fleet of vessels from ESSA and from the other agencies transferred into NOAA provide the nation an improved capability for work on a wide range of problems. It permits greater joint utilization in the collection of data to meet needs of fisheries activities and mapping and charting. It also improves the opportunities for the National Oceanographic Instrumentation Center to conduct tests of equipment at sea and the Sea Grant program to provide training facilities for the education of young people in this field.
- Commerce's environmental satellite system used for weather and oceanic monitoring and prediction is of interest to the National Marine Fisheries Service in the application of remote sensing to marine resources problems.
- Marine environmental predictions will make important contributions to better utilization and assessment of the nation's marine living resources.
- By combining the environmental data centers, the new agency is able to draw upon common experience and methods of operation to improve the efficiency of all of these centers.
- NOAA consolidates an outstanding and competent group of people, including the scientifically-trained ESSA Commissioned Corps, now the NOAA Commissioned Corps, providing a vital resource in developing a responsive national oceanic and atmospheric program.

Heading up the new agency will be an administrator appointed by the President who will report to the Secretary of Commerce. Until the appointment is made, Dr. Robert M. White, former head of ESSA, who has been named Interim Deputy Administrator of NOAA, is serving as Acting Administrator. Dr. John W. Townsend, former ESSA Deputy Administrator, is Interim Associate Administrator of the new agency.

Priority is being given to the establishment of an interagency agreement which will provide an effective mechanism for continuing the coordination between the former Bureau of Commercial Fisheries, now a part of NOAA, and the Bureau of Sports Fisheries which remains with the Interior Department. This will enable both agencies to share their expertise and prove mutually beneficial.

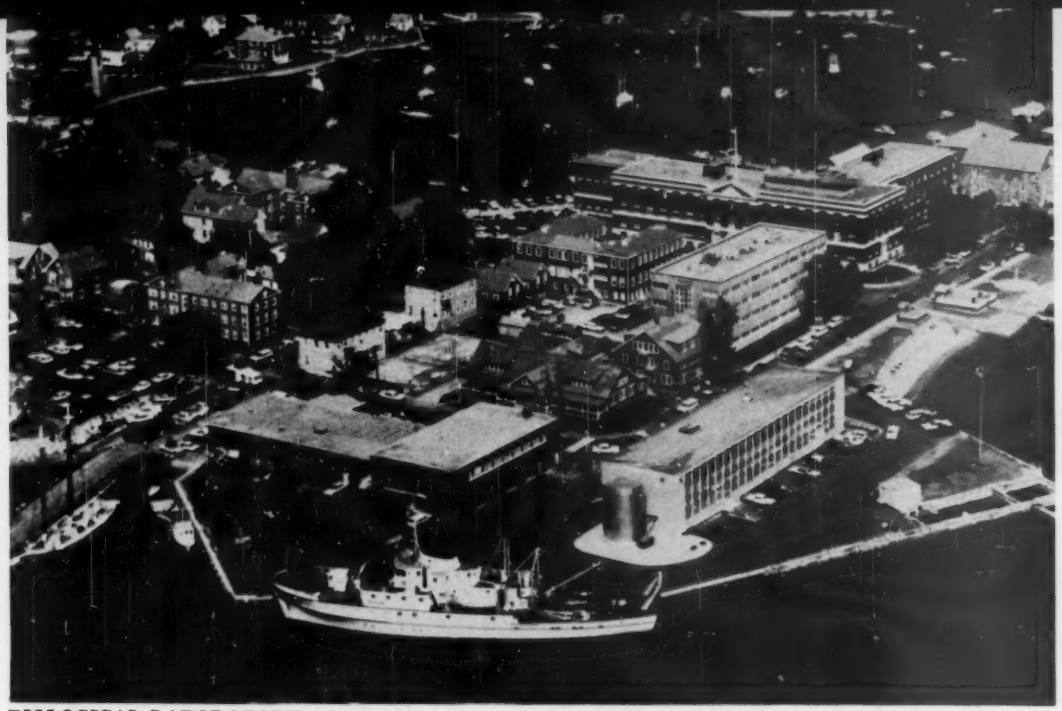
Compelling Needs

It is planned that NOAA will work in an innovative way with the nation's universities and industries encouraging and assisting the tremendous reservoir of creativity and vision that resides within them.

"We face immediate and compelling needs for better protection of life and property from natural hazards," the President pointed out in his Congressional message, "and for a better understanding of the total environment—an understanding which will enable us more effectively to monitor and predict its actions, and ultimately, perhaps to exercise some degree of control over them.

"We also face," he said, "a compelling need for exploration and development leading to the intelligent use of our marine resources. The global oceans, which constitute nearly three-

Dr. Robert M. White



BIOLOGICAL LABORATORY—*One of NOAA's National Marine Fisheries Services biological laboratories (right foreground) is at Woods Hole, Mass. The ship at center is the Federal Government's most modern fishery research vessel, Albatross IV. Marine Fisheries maintains nearly 30 major laboratories and centers and more than 50 statistics and market news offices across the nation. It has a fleet of 29 research vessels equipped for various kinds of oceanographic research and fishery exploration.*

fourths of the surface of our planet, are today the least understood, the least developed, and the least protected part of our earth. Food from the oceans will increasingly be a key element in the world's fight against hunger. The mineral resources of the ocean beds and of the oceans themselves, are being increasingly tapped to meet the growing demand. We must understand the nature of these resources, and assure their development without either contaminating the marine environment or upsetting its balance."

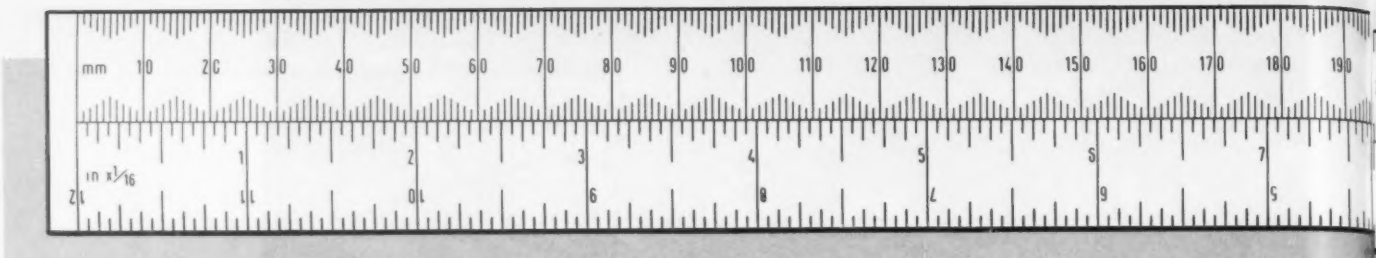
NOAA is expected to develop a national oceanic and atmospheric program of research and development. It will coordinate its own scientific and technical resources with the technical and operational capabilities of other government agencies and private institutions. Also it will continue to provide those services to other agencies of government, industry and private individuals which have become essential to the efficient operation of the nation's transportation systems, agriculture and national security.

The Secretary of Commerce has been requested to create a National Advisory Committee for the Oceans to advise on the progress of governmental and private programs in achieving the nation's oceanic and atmospheric objectives.

The President's reorganization plan is the result of more than four years of study both within and outside government. The Marine Resources and Engineering Development Act of 1966 provided for a study of all aspects of marine science to be undertaken by a Commission on Marine Sciences, Engineering and Resources, and required the Commission to recommend an overall plan for a national oceanographic program that would meet the present and future national needs. Headed by Dr. Julius A. Stratton, Chairman of the Ford Foundation, this Commission recommended that a comprehensive national program could only be achieved through the establishment of an independent agency dealing with oceanography and the atmosphere.

Situating the new agency within the Commerce Department is "a logical extension of our scientific and technological activities," Secretary Stans told the Executive and Legislative Reorganization Subcommittee of the House Committee on Government Operations in July. He pointed out that the Department already has a "solid base of science and technology which will buttress the foundation of an exciting and vigorous NOAA." Commerce, in fact, is as much a science and technology agency as it is an economic development one. At present, 60 percent of its employees are engaged in scientific and technology work.

—*NOAA*



Part I

It's A Metric World

U.S. Measurement Study Now In Survey Phase

Whether or not the United States will join the majority of the world community by converting from the present foot-pound-gallon English system of measurement to the meter-kilogram-liter metric system is to be decided in the next couple of years.

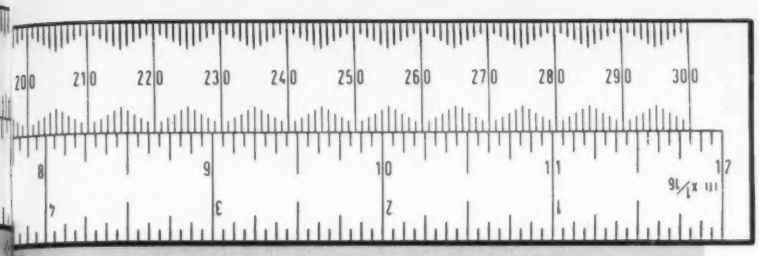
Preparing for that monumental decision which will affect so significantly each and every citizen, Commerce's National Bureau of Standards is presently involved in the second phase of a three-year U.S. Metric Study. At the conclusion of the Study, the Secretary of Commerce will make his recommendations to the Congress next August as to what action the nation should take.

Currently a series of National Metric Study Conferences are under way involving many groups and sectors of the economy. Businessmen, bankers, educators, farmers, miners and labor unionists are all being asked for their best judgments on the advantages and disadvantages of metric conversion.

Conferences of engineering, industry and professional societies were held in August at Deerfield, Mass., Academy. Consumer-related groups were heard at the Commerce Department auditorium last month. This month

This is the first of a two-part series concerning the possible conversion by the U.S. to the metric system of measurement. As the cover indicates, the U.S. is the largest of the few countries of the world not using the metric system of measure or planning to convert to its use in the future.

Because of the importance to and effect upon the business community should the U.S. decide to convert to metric, the second article will relate the story of how the United Kingdom is converting to metric and what is involved before that country achieves total metrication.



Besides the United States, only a few nations of the world are not now using or planning to use the metric system of measurement.

it is educators, the construction industry and labor. November conferences will include groups representing agriculture, mining, transportation, communications and utilities, banking, insurance, real estate, state and local governments and small business associations.

Addressing a September conference of consumer-related industries, Commerce Secretary Stans told participants that "the full importance of the U.S. Metric Study cannot be overstated. Metrication affects all facets of our society—manufacturing, marketing, exports, athletics, education, consumer habits, and the interaction of engineering with science, for example. It significantly affects," he pointed out, "our relations with other nations of the world."

Basic Issues

In this phase of the Metric Study, conferees are addressing themselves to the basic issues involved which are:

- What is the present impact within the U.S. of increasing worldwide and domestic use of the metric system?
- What would this impact be in the future, assuming that the use or non-use of the metric system continues as at present, with no coordination among the various sectors of the society?
- Alternatively, what would be the effect of a coordinated national program to increase the use of the metric system?

Responsibility for the study was assigned to the National Bureau of Standards by the Secretary of Commerce after passage of Public Law 90-472. This law authorizes the Secretary to conduct a program of investigation, research, and survey in order to appraise the current situation and gauge the likely effects of various alternative courses of action by the United States.

According to Dr. Lewis M. Branscomb, NBS director, the survey "will present more solid data on the importance of a viable measurement system to a highly technological society than has ever been available before," regardless of the final U.S. decision on the question of metric usage.

But the principal aim of the U.S. Metric Study, as expressed by its director, Daniel V. De Simone, is to reduce the uncertainties that now exist with respect to the basic issues stated above. Put another way, the aim of the study is to improve the basis upon which the Congress ultimately will make its decision. Uncertainties will still exist, for many of the considerations that will have to be taken into account by the decision makers are subjective and depend upon value judgments and the weighting that will be given to them.

The study has been divided into three phases, with the second now well under way. The first involved planning and developing key questions to be answered by the study and identification of economic sectors to be surveyed, with attention to other areas to be investigated, such as engineering standards and history. This year, in phase two, the study is gathering the data through questionnaires and special surveys. In the concluding phase, data will be analyzed and a report embodying the Secretary of Commerce's recommendations will be written.

The U.S. Metric Study is focusing on: manufacturing industry; non-manufacturing industry; Federal, state and local government impact; international implications; history of metric debate in the U.S.; engineering standards problems; commercial weights and measures activities; consumer attitudes and problems; educational issues; and impact on labor.

Results of questionnaires, meetings, and interviews will become part of surveys in the following areas:

- A study of international trade to try to determine what impact metrication is having or may have on U.S. exports and imports, assuming the nation takes one or another of the alternative courses of action.
- A manufacturing survey which has been in the making for a year and a half and is being pursued in cooperation with the American National Standards Institute and numerous other industry associations.
- A non-manufacturing survey which will be aimed at selected non-manufacturing industries where the issues of the study are of sufficient concern to warrant inquiry. This survey is being undertaken on the basis of probability sample and personal interviews.
- A defense study, concerned with the probable effects on national security of alternative courses of action with respect to metrication. This study is being conducted by a special Department of Defense team and will cover all branches of the military.
- A Federal survey, enlisting the cooperation of some 35 major agencies and departments. This survey is seeking information with respect to the probable impact of metrication on government operations and areas of responsibility.
- A special investigation of commercial weights and measures, organized because of the substantial impact that metrication would have in this area. The analysis will determine what effects and practical difficulties could be expected with respect to both weighing and measuring devices, and the operations of State weights and measures officials.
- A standards survey, concerning the very important question of how U.S. engineering standards compare with internationally adopted standards and what impact, if any, a change in our measurement system would have on U.S. effectiveness in international standards negotiations. This survey is half completed and an interim report is expected this year.

Dr. Daniel V. De Simone

Some 50 private citizens are serving on the Metric System Study Advisory Panel, whose chairman is Louis F. Polk of Dayton, Ohio. It was established to assist the U.S. Metric Study in areas in which panel members are expert.

In approaching the whole question, participants in the study are aware that increased metric usage can, of course, take either or both of two distinct forms—one, by merely changing the measurement language in which an object is described, and the other by physically changing the size of the object to conform to a metric standard. The physical change, commonly described as a change in "hardware," by its nature has a much greater impact than the language change. Involved in a "hardware" change are questions of metric engineering standards, the interlocking characteristics of various segments of manufacturing industry (e.g., mating of components such as metric-sized fasteners to fit into metric-sized threaded holes), and the availability of metric-sized

materials and parts called for in the specifications.

In framing survey questions for the U.S. Metric Study, certain realistic assumptions had to be made:

- In all manufactured products the use of the metric system would be increased only in new or redesigned items.
- Items in use—whether by the manufacturer, the consumer, the service shop, or the sales establishment—would not be converted to metric until they needed replacement. However, even then, such replacement would not occur if it was impractical to do so. By way of illustration, the size of electric outlets and plugs and the spacing between the screw-holes of outlet face plates would not be changed, nor would the gauge of railroad tracks, although at some future date engineering handbooks would show railroad gauge to be 1,435 millimeters instead of 4 feet 8½ inches.
- An exception to the above rule would be weighing and measuring devices and equipment used in commercial trade. Existing equipment would be changed to metric on a specified time schedule.

From the beginning, NBS realized that any governmental action with regard to increased metric usage would depend on an appraisal of the likely effects of a changeover on producers and consumers for all economic sectors as well as international considerations.

Congress, aware that any decision to change the system of measurement must take into account the impact on the military, made specific reference to investigating the "military advantages and disadvantages" of increased metric usage in the United States. The Department of Defense immediately undertook the task, designating the Air Force to lead the study. Synthesis of DoD results into the final NBS report is scheduled for December. NBS is coordinating a similar study involving all other Federal agencies. As with the DoD study, the object is to assess the effect of increased metric usage on such systems as transportation and communication.

The approach decided upon was a two-part manufacturing industry survey. Part A is general in nature, with questions designed to be answered by executives familiar with overall operations of their company. These questions probe into the extent and rate of increase of current metric usage.

Extent of Usage

To arrive at a "rate," the questionnaire asks for extent of usage 10 years ago, now, and expected usage five years from now for the same segments. But the most important question in Part A concerns the key issue: what would be the probable effect of a coordinated national program of metrication? Part A also includes questions relating to metric usage in export trade and foreign operations, what impact it foresees in the form of competition from imports, what changes the company anticipates in its export trade, and its evaluation of the need for development of international engineering standards.

Part B of the questionnaire will yield data on the cost to industry if it were to increase metric usage on an optimum time schedule. Added manufacturing costs (basically, one-time costs) would include: development and adoption of new standards; replacement of engineering drawings; retraining of engineers, draftsmen, and operators; re-tooling and modification of production equipment by replacement of gages, dials, and feed-rate indicators; and increased inventories during the transition period. It already has been determined that for some manufacturing groups it would be impractical to produce hardware to metric standards. Oil-well equipment, which enjoys world-wide acceptance and usage in customary units of measurement, illustrates one such industry. Rolling stock for railroads is another.

Because the determination of added costs to a company requires expensive in-depth studies, only a hundred or more companies are expected to respond to the cost question-

naire. To make maximum use of the small sample, the manufacturing spectrum was divided into three broad categories:

- Industries with potentially substantial cost impact, particularly where mating of parts and assembly of components is required. Automobiles and machinery are examples.
- Industries in which the cost impact would be slight, because only language changes—such as in labeling and change of dials or gages to read in metric units—are involved. These relate primarily to companies that package their product (e.g., paint, canning, pharmaceutical, refining, and milling).
- Industries for which little or no cost impact would result. Examples include cutlery, periodicals, costume jewelry, and novelties.

The diverse non-manufacturing industry includes such categories as agriculture, forestry, fisheries, mining, construction, public utilities, wholesale and retail trade, finance, and services. There are subdivisions within each of these paralleling those described in the manufacturing survey.

The survey employs statistical techniques in developing a probability sample from the Standard Industrial Classification (SIC) as established by the Bureau of the Budget and used by the Bureau of the Census in its surveys. One aspect not to be overlooked is the determination of whether small businesses would face more serious dislocation than their larger competitors.

Potential advantages of the metric system in the fields of education and science have been well understood for over a century, paving the way, for example, for the metrication of the pharmaceutical industry in the United States and for extensive, if not predominant, use of the metric system in the teaching of science courses in our secondary schools and colleges. But the bulk of our education and engineering community, serving the public and industries accustomed to the inch-pound-gallon system, has used the customary system of measurement in the instruction of our students and the training of our workers. Now the task is to see what the advantages are and what problems might develop from increasing metric usage in schools, by workers, and by the general public.

Separate Study

A separate study for each of these groups is planned. The current studies differ from previously described surveys in that the questions will be directed for the most part to associations or professional organizations representing population segments such as the student in the school, the housewife shopping at the store or cooking in the home, and the carpenter and other skilled workers in the construction industry.

Two of the key questions for which the standards study is seeking answers are:

- To what extent are U.S. standards incompatible with international standards because of the differences in the system of measurement?
- Can we retain and promote U.S. standards internationally whether or not there is a change in our measurement system?

A third question concerns the extent to which private U.S. standards bodies are participating in the development of international metric engineering standards, the extent to which they should increase their participation in the light of the growth of multi-national companies, and the extent to which the United States Government should encourage increased participation in international standards development if there is to be increased use of metric units.

The problem in the area of commercial weighing and measuring activities stems from the necessity of adapting or converting existing scales and balances in all sectors of the economy to read out in metric units, if the United States switches to their use. Grocery store scales, gasoline pumps, and heavy-duty scales used in connection with railroad freight loads and highway truck loads are the most prevalent and most obvious segments of this problem. One pertinent area that needs to be analyzed is the phasing of any coordinated effort and what

part, if any, of this effort should be on a local, state-wide or nation-wide basis. The extent and diversity of this measurement area indicate why liaison with state and local government is necessary, especially since they have laws and regulations as well as inspection systems for implementing them. The NBS study seeks to assess the potential impact in these areas.

Since the founding of the U.S., there have been questions raised concerning use of metric units. In fact, Congress passed a Bill in 1866 legalizing, but not making mandatory, use of the metric system in trade and commerce. Since then, over 100 bills have been drafted that would lead to conversion to the metric system. This legislative history, being assembled as part of this study, not only will be fascinating reading, but will be illuminating as to how an aroused group can thwart or assist proposed legislation.

It is expected that all of the surveys and investigations will have been completed in December of this year. The task of analyzing and synthesizing all of the resulting data will begin in January 1971. The drafting of the final report will follow, and it is expected that the final report, together with the recommendations of the Secretary of Commerce, will be ready for transmittal to the Congress in August 1971.

—National Bureau of Standards

METRIC STUDY—*Arthur Sanders (left), Executive Secretary of the Scale Manufacturers Association, Inc., Washington, D.C., discusses with Secretary Stans in the Commerce Department lobby a Metric Study exhibit displayed in connection with the second Metric Study conference last month. Mr. Sanders was one of many executives who presented their views on the prospects of U.S. metric conversion.*

Revitalizing An Agi

Congress Passes Measure On First Complete Program Since The Act Of 1936

"We shall adopt a policy that recognizes the role of government in the well-being of an industry so vital to our national defense, and stimulates private enterprise to revitalize the industry."

In these words, then Presidential nominee Richard Nixon expressed his commitment in September 1968 to revitalize the American Merchant Marine. Congress this month gave final authorization to implement this pledge. Earlier this year the Senate and the House passed slightly different versions of the measure, with only one nay vote in the lower chamber and one nay vote in the Senate. A conference committee easily worked out the minor differences in the two bills and the House by a vote of 343-4 adopted the conference report Oct. 15. The Senate the next day followed suit by a voice vote and sent the measure to the White House.

The policy and program of the Nixon Administration takes into account the many problems and opportunities that face the American maritime industry. The Maritime Administration, U.S. Department of Com-

ging Merchant Fleet

merce, will administer the President's program.

The new program recognizes that a large part of the American Merchant Marine is rapidly approaching the scrap yards. Of the 650 American ships engaged in U.S. foreign trade, some 400 were built during World War II and will probably not be operating after 1974. Another 53 ships will become over age in the succeeding eight years. This would leave a total U.S. foreign trade fleet under the American flag of only about 200 ships by 1982, assuming there is no new construction after 1970.

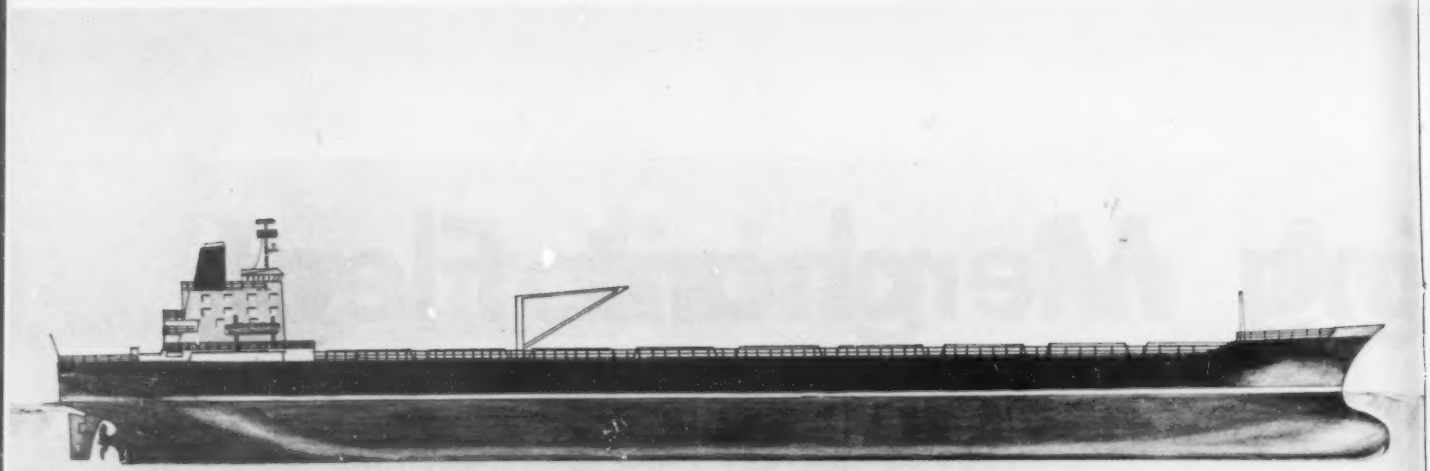
The United States is the world's greatest trading nation, accounting for nearly one-third of all the world's commerce, and most of this cargo is carried in ships. Efficient shipment of goods at reasonable rates is essential for the economic well-being of all Americans. Yet American ships carried less than 5 percent in 1969 of this country's foreign-trade cargo.

Against the background of "hard facts" relative to America's merchant fleet today, the Nixon program recognizes that the only way to reverse this alarming decline in the American fleet is by instituting a long-range building program to replace these aging ships.

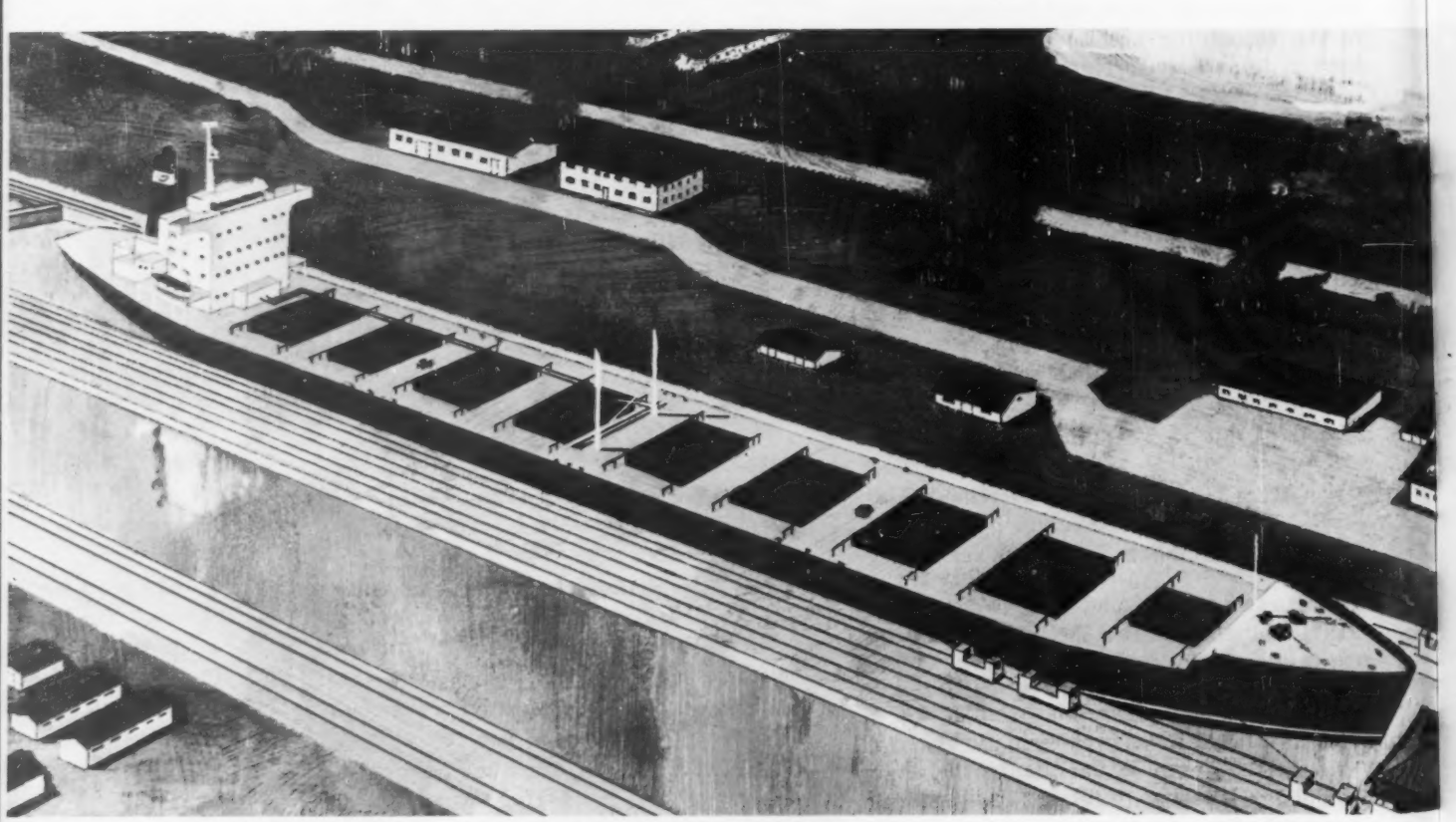
Beyond this, the President's policy presumes that no progress can be made in rejuvenating the fleet without the wholehearted

Highlights of Maritime Program

- **Construct 30 highly efficient merchant ships per year for 10 years. Average mix: 25 general cargo, 2 tankers, 3 dry bulk carriers.**
- **Limit construction subsidy to 45% in fiscal 1971 and reduce it to a 35% ceiling over the next five years.**
- **Institute a multi-year multi-ship procurement system, similar to those in use by other government agencies, to assure the shipbuilding industry sufficient business on which to base modernization programs to increase efficiency.**
- **Overhaul operating subsidy system to provide ship operators with incentives to improve their efficiency.**
- **Extend construction and operating subsidies to the bulk carrier segment of the fleet to enable operators to modernize and improve their fleets.**
- **Emphasize research and development to improve the productivity of American ships.**
- **Encourage stability in maritime labor-management relations by offering the assurances of a long-term program to improve the merchant marine.**



FLEXIBLE—*This design for standarized cargo vessels is flexible. The vessels can carry either dry or liquid bulk cargoes.*



TWOFOLD—*Here is another standard vessel which ship designers came up with to carry either dry or liquid cargoes.*

support and cooperation of shipbuilders, ship owners, and the maritime labor force, which has been forthcoming.

It also recognizes that a certain level of government support is necessary for the building program it includes.

But the Nixon plan is not a "welfare" program in that the government spends all the money and the industry reaps the benefits. It acknowledges, as the President did two years ago that the real impetus for change and improvement must come from the industry. Shipping line and shipyard management will be expected to commit large amounts of new capital to improve the efficiency of their operations in return for the commitment of $3.8 billion by the government over the next 10 years. The government will furnish a base from which revitalization can proceed. The maritime industry must take over at that point and lead the way.

President Nixon summed up this aspect of the program in his message to Congress concerning it. He said:

"Our program is one of challenge and opportunity. We will challenge the American shipbuilding industry to show that it can rebuild our Merchant Marine at reasonable expense. We will challenge American ship operators and seamen to move toward less dependence on government subsidy. And, through a substantially revised and better administered government program, we will create the opportunity to meet that challenge."

For American shipbuilders, this challenge is to build 300 ships of all types—general cargo, dry bulk, and tankers—over the next 10 years at the lowest possible cost. By assuring that the ships are built to standardized basic designs in multi-year, multi-ship series, this will allow shipbuilders to introduce mass production techniques to minimize the cost of each ship.

Under the program, shipbuilders will be encouraged to anticipate market demand by developing their own standardized designs and selling them competitively, such as some yards have successfully done already.

The Maritime Administration will also pay construction-differential subsidy directly to shipyards, replacing the former system of channeling these payments through the operator for whom the ships are being built.

"For too long, our Merchant Marine has been deteriorating. In the times of national emergency since World War II we have had to obtain from the reserve fleet—the 'bone yard'—20-year-old-plus ships for refitting at enormous costs.

"Congress this month gave final approval to the most important Merchant Marine legislation since the Act of 1936 created our modern Merchant Marine. This legislation, enacted at the request of President Nixon, will provide the means for this country to once again become a world Merchant Marine power.

"Without a doubt, I feel that we're going to have a Merchant Marine again."

—Rocco C. Siciliano, Under Secretary

This program will be administered so that the shipyards will be directly involved in the design function, thereby giving them the opportunity to incorporate their own cost-saving ideas into the designs, according to Maritime Administrator A. E. Gibson.

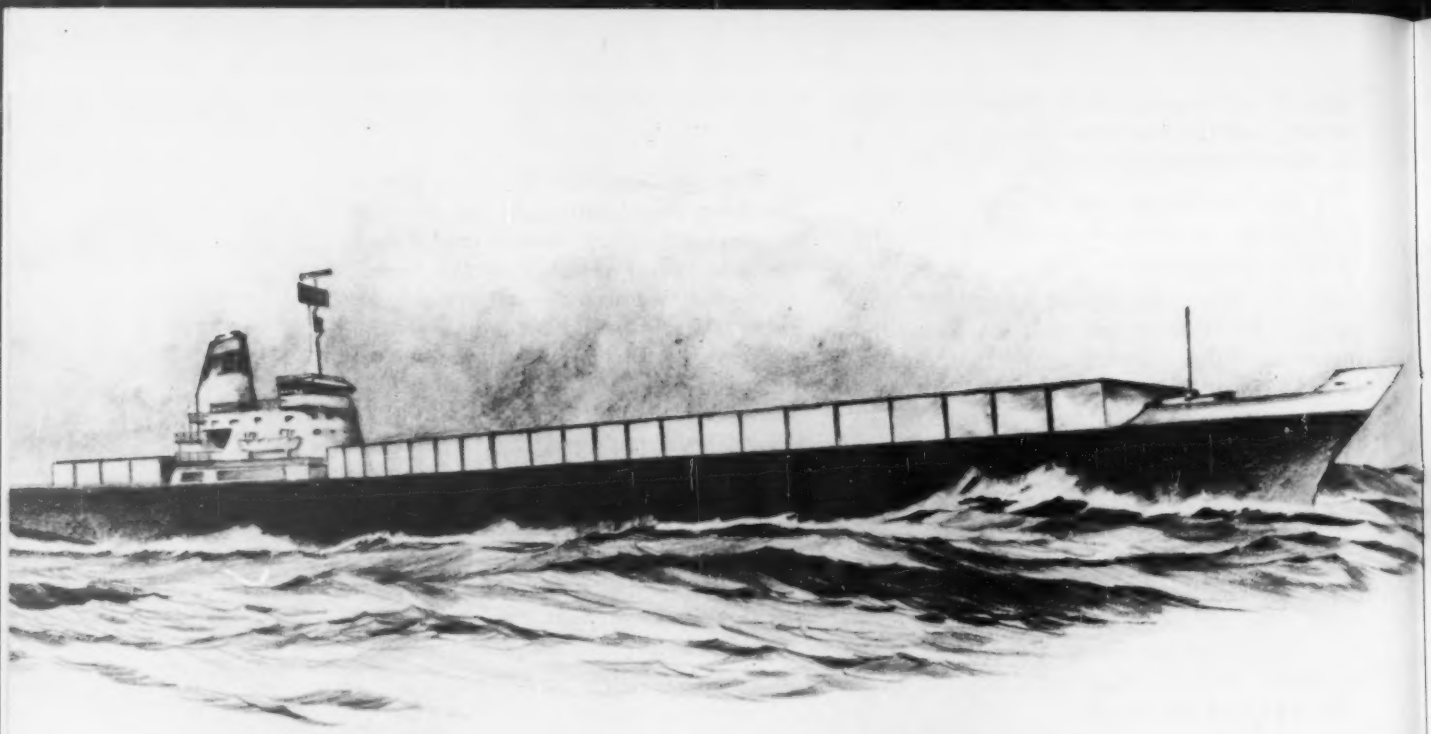
Gibson, one of the chief architects of the Administration plan, feels—and shipbuilders agree—that the present statutory construction-differential subsidy limit of 55 percent will not be necessary with this long-term building commitment and the modernization it will entail. Therefore, with the program's initiation, the subsidy limit will be lowered to a maximum of 45 percent. It will be further reduced 2 percent a year until it reaches 35 percent.

Under this gradual lessening of the subsidy level, American shipyards will become more competitive on the world shipbuilding market, as they introduce and utilize new and improved production and marketing techniques.

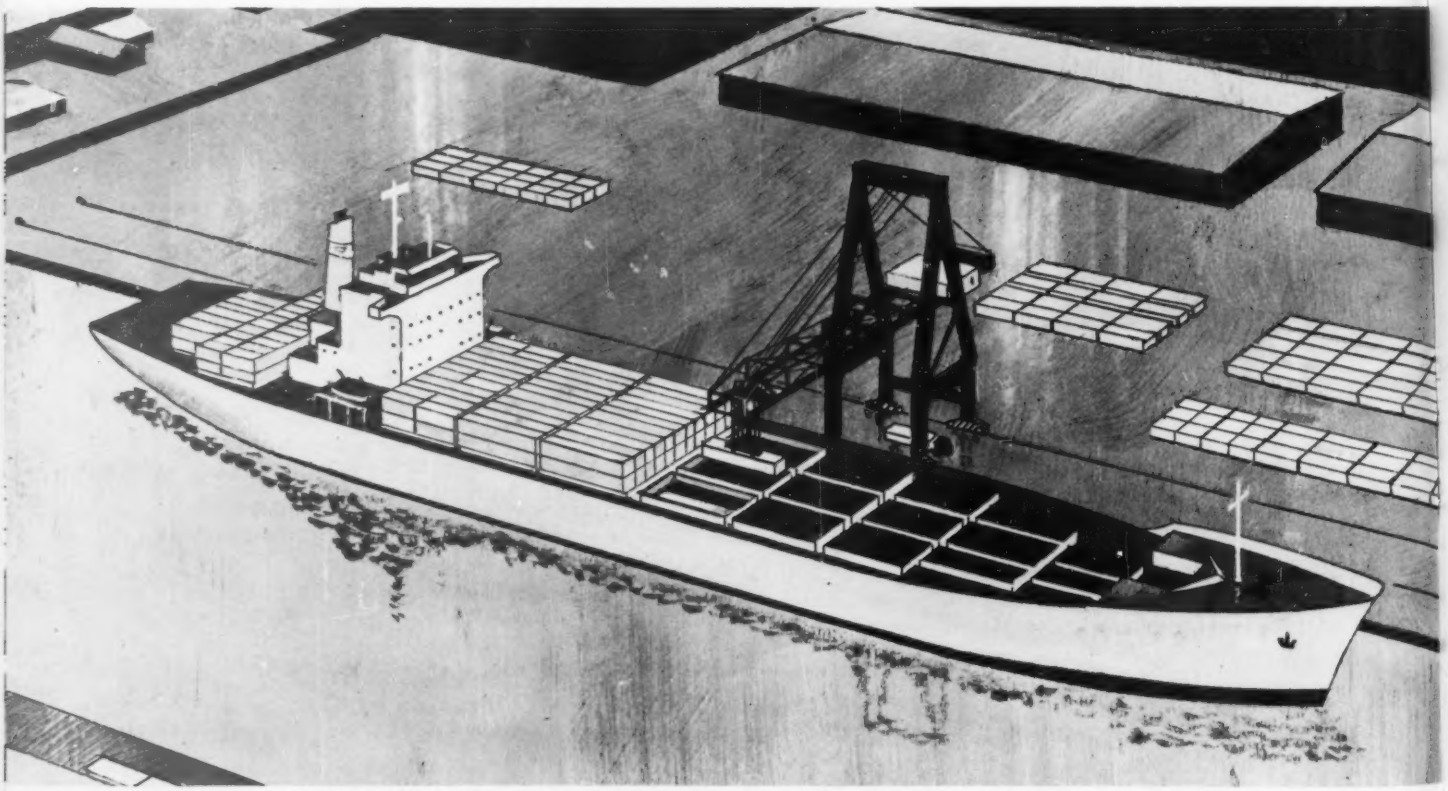
"This shipbuilding program will not be mere government largesse," Gibson emphasized.

To take advantage of this program, American shipyards will have to invest some $500 million in capital improvements.

The Maritime Administration has already taken the initial steps necessary to get the planned ship construction under way. Proposals for the first phase in the evolution of



CONTAINERSHIP—*This design is for the North Atlantic and the North Pacific and will hold 1,468 containers of 20 feet.*



COMBINATION—*This ship is a combination break-bulk carrier containership or combination roll-on, roll-off containership.*

basic ship designs, suitable for the next decade, have been reviewed. Submitted by teams of shipbuilders, naval architects, and research firms, the proposals cover the analysis of basic requirements—those of operators, traders, and shipyards—that will determine the design. Bath Iron Works Corporation and Newport News Shipbuilding and Dry Dock Company were awarded contracts for this phase of the project, which has been completed.

The necessary engineering work and the letting of contracts to start building the ships will follow as rapidly as possible, according to Gibson.

In addition to challenging American shipbuilders, the new Nixon program will fully challenge American ship operators to become more efficient—and thus more competitive on the sea lanes of the world.

The Administrator explains that this will be accomplished primarily through two devices:

1. The operating-differential subsidy system will be overhauled to eventually eliminate the subsidy on maintenance and repair costs, as well as crew subsistence. The subsidy will cover only the differentials between foreign and U.S. costs for crew's wages and vessel insurance.

   The wage subsidy system will be changed, too. Subsidy payments will be based on a base period cost—and this will be adjusted annually by an amount related to changes in a representative index of wages in the national economy.

   This method will reward operators who keep their costs below the index level. On the other hand, the operator who allows his wages to climb above the index level will be penalizing himself, because his subsidy payments will not keep pace with his costs.

2. The second area in which operators will be challenged to improve their efficiency involves bulk carrier operations. The present bulk fleet consists almost entirely of uneconomical World War II-built ships that cannot compete for commercial cargoes. They exist today almost exclusively on U.S. government-financed cargoes, those originated primarily by the Department of Agriculture and the Agency for International Development.

   The Nixon program envisions direct operating and construction subsidies to these operators to allow them to replace their aging vessels with modern highly productive vessels which will be able to operate at more competitive rates than the present fleet.

The tax-deferred capital reserve fund concept embodied in the Merchant Marine Act of 1936 will be broadened, so that all operators in the U.S. foreign trade may take advantage of this device to accumulate capital for replacing older, less productive ships with new ones.

Another provision of the 1936 law that will be expanded is Title XI mortgage and loan insurance. Like FHA home mortgages, this provides Government backing of private loans granted to ship operators for new construction. The Administration feels that this has proved very beneficial in assisting operators to raise the capital necessary to build new ships. An increase to $3 billion in the ceiling on the amount of Title XI insurance the Government can write will be necessary to cover the additional commitments which are expected to be made on construction under the new Nixon program.

The President also recognizes the importance of an adequate research and development program to the future of the American merchant marine. To this end, Maritime intends to concentrate and expand its efforts—in cooperation with other government agencies, the marine industry, and interested educational institutions—in applying technological advances to the maritime industry and in developing new concepts in marine transportation.

"The new program also recognizes the tremendous importance of port development to the merchant marine," Gibson says. "Without high productivity cargo-handling systems, the efficiency gained from our new generation of advanced vessels will be lost." Consequently the President has directed the Secretary of Commerce and the Secretary of Transportation to work with related industries and local governmental bodies on improving port operations.

—Maritime Administration

Visit U.S.A. Exhibit Begins

First Effort To Promote U.S. Tourism At Foreign Show Draws 1.2 Million

Visit U.S.A., this country's first effort to promote tourist travel to the United States at a foreign exposition, will launch a five-year world tour in Tokyo next February.

After a six-month run in Tokyo, the exhibit, which combines government and private industry skills in a giant earth-shaped display designed to attract foreign visitors to the United States, will "go on the road." It will make stops in Mexico, the United Kingdom, Italy, France and Australia.

The U.S. travel exhibit drew an official attendance of 1,209,308 at Expo '70 which closed Sept. 13 in Osaka, Japan. Capacity crowds of nearly 15,000 persons a day jammed into the six-story balloon theater featuring a multi-media travel show.

Walt Disney's production, "America The Beautiful," which drew more than a million visitors to the U.S. pavilion in Montreal last summer, will be shown inside the balloon theater when the mobile tourist seeker opens in Tokyo.

"America The Beautiful" was filmed with nine motion picture cameras operating simultaneously. Projected against an 18-foot high screen encircling the audience, the film spectacularly portrays major U.S. tourism destinations—cities, historic locations, natural wonders and the Kennedy Space Center.

The sound track is recorded in the language of the country in which it is shown.

The U.S. Travel Service, an agency of the Department of Commerce, is coordinator of the exhibit. The display's 19 sponsors, including 13 private travel industry firms and five government agencies, are helping to promote the project to increase foreign tourism in the United States.

During 1969, more than two million visitors from overseas countries visited the United States. By July of this year tourism from abroad had increased by 22 percent.

—U.S. Travel Service

Worldwide Tour In Tokyo

EXHIBIT LURES VISITORS—*Visit U.S.A., which soon begins a five-year world tour to promote foreign travel to the United States, was a prime attraction at Expo '70 in Osaka, Japan. Crowds are shown waiting in line to see this country's first effort at an international exposition to promote tourism in the U.S.A.*

DISNEY FILM INSIDE—*America's scenic and historic beauty will be portrayed in a Walt Disney production added to the mobile U.S. travel exhibit for its world tour which opens in Tokyo in 1971. This scene at right is the front of the theater while at Expo '70 in Osaka, Japan.*

DOMESTIC BUSINESS REPORT

- 1970 Census figures
- EDA advisory panel
- Business Daily
- Population tapes
- Floating factories

Surprising Trends Found In 1970 Census Figures

Is the population explosion over?

Although there has been a 20 million increase in U.S. population since 1960, substantial indications are that the population has actually slowed down in its rate of growth.

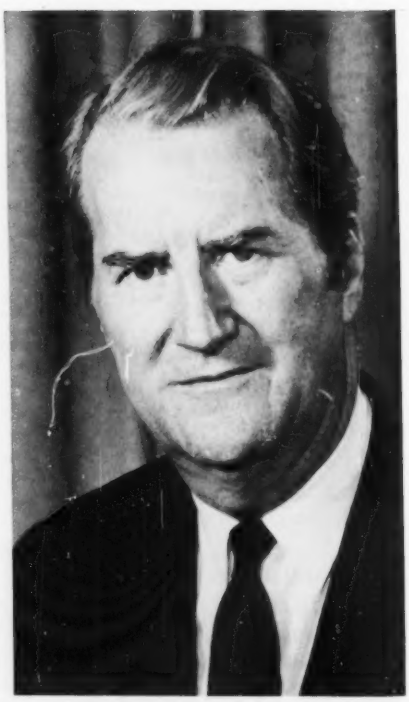
According to preliminary results from the 1970 census, the number of persons increased slightly less than 12 percent during the last decade—compared with about 18 percent in the 1950s. The average rate of growth for the 1950s was about 1.7 percent per year; currently, the average rate is about 1 percent per year.

Preliminary census figures unveiled more surprises. Birth rates have dropped since the high levels of the late 1950s; family units are changing—the average number of persons under 18 per household declined from 1.21 to 1.12; and for the first time, U.S. suburban areas are more heavily populated than the cities they surround.

Does this mean the next decade may reveal an overall loss in U.S. population?

Dr. George H. Brown, Census Bureau Director thinks not. "The growth over the next ten or twenty years," he said, "may continue at the slower rate, but it is unlikely that we shall stop increasing our population entirely.

"The large number of babies that were born in the post war years are now coming of age. This means that 43 million persons 20-34 years old will increase in



Dr. George H. Brown

THE 1970 CENSUS SCOREBOARD

Rank Prelim. 1970	Rank Final 1960	State	1970 preliminary population count[1]	1960 final population count	Change, 1960 to 1970 Number	Change, 1960 to 1970 Percent
		U. S.	200,306,660	179,323,175	20,983,485	11.7
21	19	Alabama	3,373,006	3,266,740	106,266	3.3
50	50	Alaska	294,607	226,167	68,440	30.3
33	35	Arizona	1,752,122	1,302,161	449,961	34.6
32	31	Arkansas	1,886,210	1,786,272	99,938	5.6
1	2	California	19,715,490	15,717,204	3,998,286	25.4
29	33	Colorado	2,178,176	1,753,947	424,229	24.2
24	25	Connecticut	2,987,950	2,535,234	452,716	17.9
46	46	Delaware	542,979	446,292	96,687	21.7
9	10	Florida	6,671,162	4,951,560	1,719,602	34.7
15	16	Georgia	4,492,038	3,943,116	548,922	13.9
40	43	Hawaii	748,575	632,772	115,803	18.3
42	42	Idaho	698,275	667,191	31,084	4.7
5	4	Illinois	10,977,908	10,081,158	896,750	8.9
11	11	Indiana	5,143,422	4,662,498	480,924	10.3
25	24	Iowa	2,789,893	2,757,537	32,356	1.2
28	28	Kansas	2,222,173	2,178,611	43,562	2.0
23	22	Kentucky	3,160,555	3,038,156	122,399	4.0
20	20	Louisiana	3,564,310	3,257,022	307,288	9.4
38	36	Maine	977,260	969,265	7,995	0.8
17	21	Maryland	3,874,642	3,100,689	773,953	25.0
10	9	Massachusetts	5,630,224	5,148,578	481,646	9.4
7	7	Michigan	8,778,187	7,823,194	954,993	12.2
19	18	Minnesota	3,767,975	3,413,864	354,111	10.4
30	29	Mississippi	2,158,872	2,178,141	—19,269	—0.9
13	13	Missouri	4,636,247	4,319,813	316,434	7.3
43	41	Montana	694,409*	674,767	19,642	2.9
35	34	Nebraska	1,468,101	1,411,330	56,771	4.0
47	49	Nevada	481,893	285,278	196,615	68.9
41	45	New Hampshire	722,753	606,921	115,832	19.1
8	8	New Jersey	7,117,639	6,066,782	1,050,857	17.3
37	37	New Mexico	998,257	951,023	47,234	5.0
2	1	New York	17,979,712	16,782,304	1,197,408	7.1
12	12	North Carolina	4,961,832	4,556,155	405,677	8.9
45	44	North Dakota	610,648	632,446	—21,798	—3.4
6	5	Ohio	10,542,030	9,706,397	835,633	8.6
27	27	Oklahoma	2,498,378	2,328,284	170,094	7.3
31	32	Oregon	2,056,171	1,768,687	287,484	16.3
3	3	Pennsylvania	11,669,565	11,319,366	350,199	3.1
39	39	Rhode Island	922,461	859,488	62,973	7.3
26	26	South Carolina	2,522,881	2,382,594	140,287	5.9
44	40	South Dakota	661,406	680,514	—19,108	—2.8
18	17	Tennessee	3,838,777	3,567,089	271,688	7.6
4	6	Texas	10,989,123	9,579,677	1,409,446	14.7
36	38	Utah	1,060,631	890,627	170,004	19.1
48	47	Vermont	444,330*	389,881	54,449	14.0
14	14	Virginia	4,543,249	3,966,949	576,300	14.5
22	23	Washington	3,352,892	2,853,214	499,678	17.5
34	30	West Virginia	1,701,913	1,860,421	—158,508	—8.5
16	15	Wisconsin	4,366,766	3,951,777	414,989	10.5
49	48	Wyoming	332,416*	330,066	2,350	0.7
		District of Columbia	746,169	763,956	—17,787	—2.3

[1] The 1970 Preliminary U.S. Census count does *not* include Americans (military and civilian) overseas, crews of naval and merchant vessels, persons found through Census rechecks, and transients.
* Official Final Count

number to 58 million by 1980. Trends also indicate that there will be an increase in the number of young marrieds, with consequent increase in demand for housing, furniture and equipment, and probably an increase in the number of births."

This, however, may not ease the shock of those state and local government officials who have taken exception to the 1970 preliminary census figures. In one metropolitan area after another there has been a population decline in the central city, with a substantial increase in adjoining areas. In addition, the population shifts of the 1950s have

continued from mid-country out and from south to north. In particular, the coastal areas have grown larger—about 53 percent of the American people now live in counties within 50 miles of the coasts.

To many local governments, these population losses mean economic losses. The area affected may be the subject of a decrease in Federal monies allocated for education, and loss of aid for community projects.

For this reason, many of the affected government officials are demanding recounts, alleging inaccuracies. "It can't be true," they said, because their voter registrations were up, more houses had been built, and there were more licensed automobiles than ever before. As a result, some officials insisted their population has grown since the last census.

What had not been taken into account is that more voters may mean a deeper interest by the citizens of that area in political affairs; more houses may mean young people are leaving home earlier and setting up their own domiciles, and elderly persons are maintaining quarters of their own; more automobiles may mean a more affluent society. Known as social and economic indicators, these are not accurate as population indicators.

In fact, current population indicators have revealed that many areas of the nation are losing people. "There has been an absolute decline in population in one-half of our counties between 1960 and 1970, particularly where agriculture has been the dominant occupation," said Dr. Brown.

The Census Bureau has received 1216 complaints from communities concerning their population count. Reviewing and clarifying arithmetic procedures or corporate boundary designations have cleared 772. The other complaints will be resolved after intensive locally sponsored and census-assisted searches to find missed persons have been completed this fall. In 185 of these searches, the Census Bureau found an increase amounting to only seven persons per 10,000.

Nevertheless, over the years the inbred fear of "the government" has led many people to the ranks of the uncounted. This was particularly true in the 1960 census, when an estimated 3.6 million whites and 2.1 million blacks were not recorded.

To prevent a repetition of missed persons in the '70 census, the Bureau initiated three reforms in census taking: pre-listing of addresses was used for the first time in 60 percent of the nation; an audit was performed on housing units reported "vacant" to determine whether these units were actually empty; and a post-enumeration check was carried out by the Post Office in areas where the mail-back questionnaires were not used.

In the "mail-back" areas close to 90 percent of the questionnaires were returned—a higher return percentage than had been expected by the Bureau—leaving only 10 percent to be followed up with personal calls. The audit of so-called "vacant" houses revealed some were actually occupied. The Post Office check was used in most of the areas where census takers canvassed all homes on a door-to-door campaign.

In areas where a count error was charged, intensive "Were You Counted" campaigns were organized. Mayors and Congressmen were among those asked to participate, and concentrated media appeals were made to reach those who might not have been counted. Any persons located by this means are added to the census count.

The final count, which will be reported to President Nixon before December 1, 1970, will be the most complete census ever taken.

—Census Bureau

Chairman Jerome W. Van Gorkom

Business-Labor Panel Assists EDA Programs

Twenty-five of the Nation's business and labor leaders met Oct. 1 in Washington, D.C., to implement the National Public Advisory Committee on Regional Economic Development.

The new panel, acting in an advisory capacity to the Secretary of Commerce and Assistant Secretary for the Department's Economic Development Administration, drew up plans to help EDA in its efforts to build more job openings and better living conditions in economically depressed areas.

EDA, established in the Commerce Department under the terms of the Public Works and Economic Development Act, assists some 900 areas eligible for EDA aid through public works grants and loans and business development loans.

The advisory panel is chaired by Jerome W. Van Gorkom of Chicago, Ill., President of Trans Union Corporation.

Committee members serving with Van Gorkom include: An-

thony A. Alaimo of Alaimo, Taylor, & Bishop law firm, Brunswick, Ga.; Orin E. Atkins, Ashland Oil, Inc., Ashland, Ky.; Thomas Bolack, former Governor of New Mexico; John S. Bugas, retired Vice President of Ford Motor Company; Victor Bussie, President of AFL/CIO of Louisiana; J. D. Stetson Coleman, Fannie May Candy Company; Frank L. Fernbach, Assistant to the President for Special Projects, United Steelworkers of America; W. Yost Fulton, Fulton, Reid & Staples, Inc., Cleveland, O.; Harry R. Goff, President, the James Dole Corporation, San Francisco, Calif.; The Rev. Andrew M. Greeley, Program Director of National Opinion Research Center, University of Chicago; Luther H. Gulick, Institute of Public Administration and the New York Bureau of Municipal Research; Walter E. Hoadley, Bank of America, National Trust and Savings Association, San Francisco, Calif.; Walter T. Margetts, Jr., Latham Foundry, Paterson, N.J. and Hudson & Manhattan Corporation, New York, N.Y.

Also, Robert B. Patteson, Jr., Wachovia Bank and Trust Company, Kinston, N.C.; Leon M. Payne, Andrews, Kurth, Campbell & Jones law firm, Houston, Tex.; Roscoe Pickett of Pickett, Pickett, Akerman and Shipley law firm of Atlanta, Ga. and Washington, D.C.; John S. Rouzie, First National Bank of Bowman, N.D.; Franklin B. Schmick, Industrial Consultants, Inc., of Chicago; William T. Sesnon Jr. of Los Angeles, Calif., rancher and oil producer; Charles B. Shuman, American Farm Bureau Federation; Whitney Stone, Stone & Webster, Inc., N.Y.; Jack I. Straus, R. H. Macy & Co., Inc.; S. Joseph Tankoos, Jr., Muss-Tankoos Corporation, N.Y.; and Donald Wales, the Chicago Corporation.

—Economic Development Administration

Daily Lists New Procurement Items

For 20 years, *Commerce Business Daily* has been the official U.S. Department of Commerce information source on proposed Federal procurements of supplies and services, annually listing more than 100,000 procurement items totaling $25 to $30 billion.

The five-day-a-week Daily has the largest paid subscription of all present Commerce publications—more than 23,000. It lists all unclassified procurement items of the Government of $10,000 by military agencies and $5,000 or more by civilian agencies, U.S. Government contract awards, subcontracting leads, sales of surplus property, and foreign business opportunities for U.S. firms.

Recent additions to the Daily include listing of procurements for personal and professional services, as well as "urgency procurement" items. A lead time of 21 days for bidding is provided on standard items and, when possible, 30 days on other than standard items. Procurement agencies must submit contract awards for publishing on a daily basis.

Use of the Daily may eliminate the necessity of a small businessman making a trip to Washington to bid on Government contracts or having a "troubleshooter" act for him. For example, a Pennsylvania firm received its first $250,000 Government contract without its management and engineering team leaving their desks. The firm sent for the specifications of a heat sensing system that was listed in the Daily. The firm's engineers reviewed the specifications, the company submitted a bid, and it was accepted. Since then, the company has been awarded other Government contracts, opening new roads for diversification and economic growth.

Subscriptions to *Commerce Business Daily* can be obtained by writing to the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, or your local Department of Commerce Field Office. The cost is $25 per year ($30.25 additional for air mail).

—Bureau of Domestic Commerce

More Detailed 1970 Census Information Now Available On Computer Summary Tape

The Census Bureau can now provide an additional source of information on 1970 population and housing in the form of computer summary tapes containing much greater detail than the printed reports.

Although some items will be withheld to protect confidentiality, the tapes will contain more subject and geographic detail than is feasible or desirable in the Bureau's printed reports.

The printed population and housing unit reports are issued in three stages: preliminary, advance, and final.

- Publication of preliminary population and housing unit reports, which began last May and June, respectively, is now nearing completion.
- Advance population reports, containing final head counts, are beginning to be issued. In addition, a series of reports on general characteristics of the population and housing are being printed.
- Final population and housing reports, containing detailed characteristics, will be issued later.

For additional information on the scope and general content of census publications and computer summary tapes, write to the Bureau of the Census, Washington, D.C., 20233, or to any U.S. Department of Commerce Field Office for a free copy of "1970 Census of Population and Housing—Tentative Publication and Computer Tape Program."

—Census Bureau

Mothballed Merchant Fleet To Be Floating Factories?

"Mothballed" vessels of the Maritime's National Defense Reserve Fleet may be launched on a new career—housing!

The Stanley Works, New Britain, Conn., has been awarded a $99,974 contract to study the feasibility of converting "mothballed" merchant ships into housing factories.

The six-month study, jointly funded by the Commerce Department Maritime Administration and the Department of Housing and Urban Development, will determine whether any of the ships can be effectively used as fabrication or assembly factories of low-cost modular or prefabricated housing.

Stanley's subcontractors for the study are General Dynamics Corporation's Quincy, Mass., shipyard; Slayter Associates, Inc., Elkhart, Ind.; and Prestressed Concrete of Colorado, Inc., Denver, Colo.

—Maritime Administration

Fiscal 1970 Funds From EDA To Aid U.S. Economic Growth

Economic Development Administration monies in fiscal 1970 helped inaugurate 598 industrial or commercial projects to create new jobs and raise living standards in areas designated as economically depressed.

More than $218 million in Federal funds have been invested by EDA during the fiscal year in low-income, high unemployment areas of the United States. Projects included sewer and water installations and expansions, industrial park developments, plant constructions and expansions, port facility expansions and educational training assistance.

While all projects were processed through six EDA regional offices, each originated at the local level. According to Robert A. Podesta, Assistant Secretary of Commerce for Economic Development, "The principle of local initiation and implementation is the vital factor in the effectiveness of the Federal development program."

Funds were approved for:

- *Atlantic Regional Office* (Philadelphia, Pa.), $32.6 million: Connecticut—3 projects, $3.78 million; Delaware—2 projects, $30,322; Maine—8 projects, $1.05 million; Maryland—5 projects, $177,820; Massachusetts—10 projects, $1.07 million; New Hampshire—1 project, $75,000; New Jersey—9 projects, $2.15 million; New York—19 projects, $7.19 million; Pennsylvania—19 projects, $4.15 million; Rhode Island—3 projects, $2.17 million; Vermont—1 project, $2,273; Puerto Rico—12 projects, $10.25 million; the Virgin Islands—1 project, $57,574; District of Columbia—6 projects, $377,596.
- *Mideastern Regional Office* (Huntington, W.Va.), $32.6 million: Kentucky—19 projects, $7.61 million; North Carolina—17 projects, $7.54 million; Ohio—15 projects, $6.53 million; Virginia—7 projects, $2.85 million; West Virginia—19 projects, $8.03 million.
- *Southeastern Regional Office* (Huntsville, Ala.), $57.9 million: Alabama—20 projects, $7 million; Florida—3 projects, $218,254; Georgia—11 projects, $11 million; Mississippi—42 projects, $27.91 million; South Carolina—14 projects, $6.21 million; Tennessee—9 projects, $5.56 million.
- *North-Central Regional Headquarters* (Chicago, Ill.), $21.2 million: Illinois—15 projects, $4.09 million; Indiana—1 project, $18,750; Iowa—3 projects, $577,500; Michigan—11 projects, $3.04 million; Minnesota—20 projects, $4.41 million; Missouri—9 projects, $3.24 million; Nebraska—2 projects, $140,745; North Dakota—8 projects, $4.17 million; South Dakota—5 projects, $682,615; Wisconsin—9 projects, $759,869.
- *Western Regional Office* (Seattle, Wash.), $24.6 million: Alaska—11 projects, $4.78 million; California—69 projects, $13.63 million; Hawaii—1 project, $14,160; Idaho—4 projects, $1 million; Montana—10 projects, $1.64 million; Oregon—3 projects, $559,458; Washington—7 projects, $2.91 million; American Samoa—1 project, $20,946.
- *Southwestern Regional Office* (Austin, Texas), $49.4 million: Arizona—17 projects, $9.74 million; Arkansas—26 projects, $7.34 million; Colorado—4 projects, $5.72 million; Kansas—1 project, $669,500; Louisiana—15 projects, $3.09 million; New Mexico—12 projects, $4.98 million; Oklahoma—24 projects, $9.79 million. Texas—32 projects, $7.44 million; Utah—3 projects, $63,435; Wyoming—1 project, $2,500.

EDA, initiated under the Public Works and Economic Development Act of 1965, provides Federal assistance to overcome problems of unemployment through the implementation of local programs designed to stimulate economic growth. The Commerce agency is authorized to approve public works grants and loans and low-interest, long-term business loans, as well as to provide direction and technical assistance to the economic development districts, communities and businesses involved in the projects.

—Economic Development Administration

Business Calendar

October 23—Population Priorities and Options for Commerce and Industry—1970-2000. U. of North Carolina, Chapel Hill, N.C. For information contact: Dr. M. W. Freymann, Carolina Population Center, 123 W. Franklin St., Chapel Hill, N.C. 27514.

November 15-18—1970 Discover America Pow Wow and Travel Mart. Deauville Hotel, Miami Beach, Fla. For information contact: Donald N. Martin and Company, 630 5th Ave., Rockefeller Plaza, N.Y., N.Y.

SCIENCE & TECHNOLOGY REPORT

- Industrial pollution control council
- Commerce selects Technical Advisory Board
- Intracoastal waterway charting
- New NOAA scientific survey vessel
- Patents of interest

Top Level Industrial Pollution Council Gets Down To Work

Finding answers to the serious industrial pollution problem afflicting the nation today is the task of a newly-appointed Presidential Council of high level corporation executives representing all of the major segments of American industry.

Created in April, the 62-member National Industrial Pollution Control Council is to submit to President Nixon and to the Chairman of the Council on Environmental Quality, Russell E. Train, through the Secretary of Commerce, a series of specific recommendations to clean up the environment.

"It is widely acknowledged that our productive economy and our advancing technology have helped to create many of our environmental problems," the President pointed out in establishing the new Council. "The effort to restore our environment cannot be successful unless the public and the the private sector are both intensively involved in this work," he added.

Three months after its creation, the Council issued its first report on efforts to identify and isolate pollution problems, the work being done to cope with them, and the difficulties to be overcome. It reported that technical barriers and inconsistencies in pollution control standards at Federal, state and local governmental levels had to be overcome

Chairman Bert Cross

PONDERING POLLUTION—*Charles R. Orem, president of Armour and Company, Chicago (left), and Milton Mumford, board chairman of Lever Brothers, New York, sit with other members of the National Industrial Pollution Control Council at an early meeting at the Department of Commerce. First report of the Council indicates problem areas are being identified so solutions may be sought.*

and that these barriers are now being identified on a case by case basis by the Council.

"The very act of creation of the Council," said Secretary Stans in releasing the Council's first report, "has already stimulated more vigorous action on the part of industry. Perhaps more important, government now has a highly informed and dedicated source of advice on the practicalities of environmental quality improvement as well as a direct link to the leaders of industry who, in the final analysis, are the ones who will get the cleanup job done."

Chairman of the pollution council is Bert S. Cross, board chairman of the Minnesota Mining and Manufacturing Company. Willard F. Rockwell, Jr., board chairman and president of North American Rockwell Corporation, is vice chairman.

Council members are: George E. Keck, President, United Air Lines, Chicago, Ill.; Charles C. Tillinghast, Jr., Chairman, Trans World Airlines, Inc., New York, N.Y.; Edward N. Cole, President, General Motors Corp., Detroit, Mich.; L. A. Iacocca, President, North American Automotive Operations, Ford Motor Co., Dearborn, Mich.; Donald M. Kendall, President, Pepsi Co., Inc., New York, N.Y.; W. K. Coors, President, Adolf Coors Co., Golden, Colo.; Cris Dobbins, Chairman and President, Ideal Basic Industries, Inc., Denver, Colo.; Robinson F. Barker, Chairman, PPG Industries, Inc., Pittsburgh, Pa.; Birny Mason, Jr., Board Chairman, Union Carbide Corp., New York, N.Y.; Charles H. Sommer, Chairman, Monsanto Co., St. Louis, Mo.; John Corcoran, President, Consolidation Coal Co., Inc., Pittsburgh, Pa.; Thomas C. Mullins, President, Peabody Coal Co., St. Louis, Mo.

Bertram L. Perkins, Chairman and President, Morrison-Knudesen Co., Inc., Boise, Ida.; H. Chandlee Turner, Jr., Chairman, Turner Construction Co., New York, N.Y.; William F. May, Chairman and President, American Can Co., Greenwich, Conn.; Ellison L. Hazard, Chairman and President, Continental Can Co., Inc., New York, N.Y.

Edwin D. Dodd, President, Owens-Illinois, Inc., Toledo, Ohio; John L. Gushman, President, Anchor Hocking Corp., Lancaster, Ohio; Leo H. Schoenhofen, Chairman, Container Corporation of America, Chicago, Ill.; C. Raymond Dahl, President, Crown Zellerbach

Vice Chairman W. F. Rockwell, Jr.

Corp., San Francisco, Calif.; Howard J. Morgens, President, Procter and Gamble Co., Cincinnati, Ohio; Milton C. Mumford, Board Chairman, Lever Brothers Co., New York, N.Y.; Donald C. Burnham, Chairman, Westinghouse Electric Corp., Pittsburgh, Pa.; Fred J. Borch, Chairman, General Electric Co., New York, N.Y.

Clifford D. Siverd, President, American Cyanamid Co., Wayne, N.J.; Herbert F. Tomasek, President, Chemagro Corp., Kansas City, Mo.; C. W. Cook, Chairman, General Foods Corp., White Plains, N.Y.; Howard C. Harder, Chairman, CPC International, Inc., Englewood Cliffs, N.J.; James P. McFarland, President, General Mills, Inc., Minneapolis, Minn.; Robert J. Keith, Chairman, Pillsbury Co., Minneapolis, Minn.; Robert W. Reneker, President, Swift and Co., Chicago, Ill.; Charles R. Orem, President, Armour and Co., Chicago, Ill.; Paul L. Davies, Senior Director, FMC Corp., New York, N.Y.; Arthur J. Santry, Jr., President, Combustion Engineering, Inc., New York, N.Y.; George G. Zipf, President, Babcock and Wilcox Co., New York, N.Y.

Ralph Evinrude, Chairman, Outboard Marine Corp., Jensen Beach, Fla.; Rodney C. Gott, Chairman, AMF Inc., New York, N.Y.; Frank R. Milliken, Chairman, Kennecott Copper Corp., New York, N.Y.; Gilbert W. Humphrey, Chairman, Hanna Mining Co., Cleveland, Ohio; Karl R. Bendetsen, Chairman, U.S. Plywood-Champion Papers, Inc., New York, N.Y.; Edward B. Hinman, President, International Paper Co., New York, N.Y.; J. K. Jamieson, Chairman, Standard Oil Co. (New Jersey), New York, N.Y.; Robert O. Anderson, Board Chairman, Atlantic-Richfield Co., New York, N.Y.; Stephen D. Bechtel, Jr., President, Bechtel Corp., San Francisco, Calif.; J. Simon Fluor, Honorary Board Chairman, Fluor Corp., Los Angeles, Calif.

Benjamin F. Biaggini, Jr., President, Southern Pacific Co., San Francisco, Calif.; John M. Budd, Chairman, Burlington Northern Inc., St. Paul, Minn.; Russell DeYoung, Chairman, Goodyear Tire and Rubber Co., Akron, Ohio; J. Ward Keener, Chairman, B. F. Goodrich Co., Akron, Ohio; Frank A. Nemec, President, Lykes-Youngstown Corp., New Orleans, La.; Adolph B. Kurz, Vice President, Keystone Shipping Co., Philadelphia, Pa.; Edmund F. Martin, Chairman, Bethlehem Steel Corp., Bethlehem, Pa.; Thomas F. Patton, Chairman, Republic Steel Co., Cleveland, Ohio.

Sherman L. Sibley, President, Pacific Gas and Electric Co., San Francisco, Calif.; Lelan F. Sillin, Jr., President, Northeast Utilities, Wethersfield, Conn.; Arch N. Booth, Executive Vice President, U.S. Chamber of Commerce, Washington, D.C.; Norton Clapp, Chairman, Weyerhaeuser Co., Tacoma, Wash.; and Robert B. Hansberger, Chairman, Boise Cascade Corp., Boise, Ida.

Two council members-at-large are: Werner P. Gullander, President, National Association of Manufacturers, New York, N.Y.; and H. Bruce Palmer, President, National Industrial Conference Board, New York, N.Y.

Secretary Stans has appointed Dr. Thomas W. Jackson, Professor of Mechanical Engineering at the Georgia Institute of Technology, Technical Director for the Control Council. As such, he directs the staff work required by the various sub-councils for technical assistance needed by them to survey and evaluate the plans and actions of industry in the field of environmental control.

Thirty Sub-Councils, with 136 additional industrial leaders as members, have been formed to cover all areas of industrial activity including airlines, aircraft manufacturing, automotive, beverages,

NATIONAL PROBLEM—*Edward N. Cole, president, General Motors Corporation (left), and C. W. Cook, chairman and chief executive officer of General Foods Corporation, are two of the 62-member Council vitally concerned about the need for providing the nation recommendations for solving its many diverse pollution problems.*

building materials, coal, chemicals, construction, containers, detergents, electric and nuclear, fertilizers, food, general manufacturing, heavy equipment, leisure, mining, paper, petroleum and gas, process and systems engineering, railroads and rail equipment, rubber, shipping, steel, utilities, wholesale and retail business, and wood products.

Big advantage of the new Council is that it gives businessmen the opportunity to communicate regularly with the President, the Council on Environmental Quality and other government officials and private organizations which are working to improve the quality of the environment. It also provides business and industry a direct opportunity to actively and visibly support the drive to abate pollution from industrial sources.

Immediate job of the Council has been to survey major types of industrial pollutants such as mercury and detergent phosphate pollution of streams, junked cars, and non-returnable bottle disposal, and identify roadblocks to pollution cleanup. Pollution control action to date has been analyzed and determinations are now to be made as to what can be done in future.

If the Council's efforts are to succeed, says Chairman Cross, "government at all levels—Federal, state and local—and the public as well must cooperate by understanding and recognizing the practical problems industry must surmount. Pollution cleanup equipment has to be designed, ordered, built, and installed," he adds.

"Necessary changes must be made without impairing the ability of industry to produce needed goods and services and without employment disruption," Cross points out. "Conflicting or frequently changed standards or regulations can make industry's pollution cleanup task far more difficult. Only hard work, massive new investments and time can yield an industrial system compatible with our new environmental values." —*NIPCCO*

Newly-Selected Technical Advisory Board To Continue Major Studies

Seventeen leading scientists, engineers, executives, and educators have been appointed by the Secretary of Commerce to serve on the Department's Technical Advisory Board (CTAB).

This board has completed a dozen major studies of technological problems and has continuously provided the Secretary and the Department with advice and counsel on technology and public policy since its creation in January 1963. Its studies have ranged from surface effect ships to electrically-powered vehicles. Currently the Board is engaged in studies of noise abatement and automotive fuels and air pollution.

Chairman of the CTAB is Dr. Myron Tribus, Assistant Secretary of Commerce for Science and Technology. Members are: William D. Carey, Senior Staff Member, Arthur D. Little, Inc., Washington, D.C.; Ralph E. Crump, President, Frigitronics, Inc., Shelton, Conn.; Dr. Aaron J. Gellman, Vice President-Planning, the Budd Company, Philadelphia, Pa.

Dr. J. E. Goldman, Senior Vice President, Research and Development, Xerox Corp., Stamford, Conn.; Dr. Frederick C. Henriques, Board Chairman, Technical Operations, Inc., Burlington, Mass.; Professor Frederick J. Hooven, Adjunct Professor, Thayer School of Engineering, Dartmouth College, Hanover, N.H.; W. Gordon Jarvis, President, The Rucker Company, Oakland, Calif.; Milton C. Lauenstein, President, Ventron Corp., Beverly, Mass.; Dr. Bennie D. Mayberry, Director of Institutional Development, Tuskegee Institute, Ala.; Dr. Kenneth G. McKay, Vice President, Engineering, American Telephone & Telegraph Co., New York, N.Y.

Dr. Eric R. Morgan, President, Stainless & Strip Division, Jones & Laughlin Steel Corp., Warren, Mich.; Bernard J. O'Keefe, President, EG&G, Inc., Bedford, Mass.; Dr. James Brian Quinn, Professor, Amos Tuck School of Business Administration, Dartmouth College; Dr. David V. Ragone, Dean, Thayer School of Engineering, Dartmouth College; Dr. Edward B. Roberts, Professor, Alfred P. Sloan School of Management, Massachusetts Institute of Technology, Cambridge, Mass.; and Ernest S. Starkman, Professor of Mechanical Engineering, University of California, Berkeley, Calif.

Frank Cacciapaglia, Jr., of the Patent Office, is Executive Director of the Board.

Intracoastal Waterway Charting Nears Completion Along Atlantic, Gulf Coasts

Coverage of the entire 2,460-mile Intracoastal Waterway along the Atlantic and Gulf coasts by National Ocean Survey nautical charts is nearing completion. The entire east coast from New Jersey to Florida is now covered by a small-craft chart especially designed by the National Oceanic and Atmospheric Administration for recreational boaters.

Of the three gaps remaining in the coverage of the Gulf of Mexico portion of the Intracoastal Waterway to Brownsville, Tex., a new chart has been issued for the stretch between West Bay and Santa Rosa Sound on Florida's west coast.

Only two areas are presently without small-craft coverage, and charts are now in preparation and will be issued within the next few years. One section is between Barataria, La., and Galveston, Tex. The other is from Aransas Bay to Brownsville. —NOAA

New NOAA Scientific Survey Vessel Prepares For Ocean Probe With Advanced Data System

FLOATING COMPUTER—*This $9 million vessel, the "Researcher", commissioned October 8 at Miami, Fla., is fitted with a $750,000 advanced data acquisition system, the heart of which is a computer with a capacity of 100,000 arithmetic calculations per second. In operation, the system will be able to record and process geophysical, oceanographic, hydrographic, and meteorological data automatically.*

When the 2,800-ton scientific survey ship "Researcher" steams out of the National Oceanic and Atmospheric Administration's Atlantic Marine Center at Norfolk, Va., on her initial oceanographic survey voyage this Fall, she will have the most advanced data acquisition system (DAS) ever to be placed aboard such a vessel.

This new floating laboratory has 4,000 square feet of enclosed laboratory space and accommodations for 22 officers and scientists and a crew of 54.

Commissioned earlier this month at Miami, Fla., the $9 million "Researcher" is fitted with a $750,000 DAS which represents a major advance in the state of the art over DAS equipment installed on any other oceanographic vessel.

A computer with a capacity of 100,000 arithmetic calculations per second is the heart of the DAS. The system is designed to collect and record scientific data. When the ship is under way, it will sample, by means of shipboard and towed sensors, record and process geophysical, oceanographic, hydrographic, and meteorological data automatically and routinely.

The system will also log the ship's position continuously, and the computer can be used for concurrent processing of non-routine data. When the ship is stationary, the system will sample and process data sensed by shipboard instruments and by an underwater multisensor package, and also handle oceanographic data. The DAS frees many highly trained specialists from the routine task of sorting and analyzing a great amount of data, a task which can consume months of painstaking effort.

In addition to eliminating various problems in earlier DAS systems, the "Researcher" system is sufficiently advanced in design so that it will be possible for most scientists to use its facilities. Older systems require the assistance of computer specialists.

This advanced system was built by Texas Instruments, Inc., of Dallas, Texas, to specifications prepared by engineers and electronic technicians at NOAA.

"Researcher" is capable of handling helicopters and small research submersibles and electronically equipped to probe the ocean's depths. The vessel is also equipped with a hydraulic ramp on the stern over which heavy oceanographic equipment such as ocean bottom cores, rock dredges, and buoys, can be brought directly from the surface of the sea to the ship's main deck or superstructure deck.

A major feature of the ship's

equipment is a 20-ton crane which can lift heavy objects without swaying. Land-based trailers housing scientists and their equipment can be lifted intact to the deck, where they are secured and electrical and other connections made, enabling the scientists to continue their work unimpaired while the ship is sailing.

The vessel will engage in oceanographic surveys in the Atlantic and the Gulf of Mexico. Her home port will be Miami, Fla., site of NOAA's Atlantic Oceanographic and Meteorological Laboratories.

—*NOAA*

Science Calendar

October 27-29—Metric Study Conference (Labor), National Bureau of Standards, Gaithersburg, Md.

November 16-20—Metric Study Conference (Agriculture, Forestry, Fisheries, Mining, Transportation, Communication and Utilities, Banking, Insurance, Real Estate, State and Local Governments, Building Maintenance, Medical Services, Legal Services, Engineering Services, Small Business Associations, Related Professional Societies), Commerce Department Auditorium, Washington, D.C.

June 21-24, 1971—Fifth Symposium on Temperature, Its Measurement and Control in Science and Industry, Sheraton Park Hotel, Washington, D.C. Sponsors: American Institute of Physics, the Instrument Society of America, and the National Bureau of Standards.

* * *

JOHN F. O'CONNOR, of Chicago, was the only individual to receive over one hundred patents during any one year in the history of the U.S. Patent Office. He received a total of 102 patents in 1919.

Patents Of Interest

Following President Nixon's order earlier this year that anti-pollution inventions be granted priority, the U.S. Patent Office issued Sept. 29 the first two patents under the priority program. They were:

—A method of producing heavy fuel oil with low sulphur content. Sulphur is removed from heavy petroleum fractions by combining it first with hydrogen. A hydrogen sulphide released in the reaction can be further processed to make marketable elemental sulphur. Patent No. 3,531,398 was issued to Esso Research and Engineering Company. The process is used by an affiliated company, the Creole Petroleum Corp., of Venezuela. Inventors are Clark E. Adams, a research associate of the Esso Research Laboratories, Baton Rouge, La., and William T. House, a research specialist at the Esso Research Center, Baytown, Texas.

—A process for removing color from kraft pulping waste produced by paper mills. Patent No. 3,531,370 was granted to Matthew Gould and assigned to the Georgia Pacific Corp. The company has installed a color remover at its plant in Woodland, Maine.

Other recent patents issued were:

—A lightweight collapsible container made of steel foil facing which holds about 30 times its own weight. The container, fitted together with tubular joints and locking clips, permits assembly or dismantling without the use of tools. A rubber bag may be attached to one of the interior walls and inflated to hold articles firmly in place. Patent No. 3,517,849 issued to Michael C. Presnick, Hicksville, N.Y. The product is being tested in commercial airfreight shipments.

—Goggles to protect worker's eyes from laser beams. The goggles have front and rear glass plates to absorb ultraviolet and infrared radiation. Between the plates are two sets of layers of non-conducting material. Protection is afforded without impairing ordinary visibility by space separation permitting passage of visible light of non-laser wavelengths. Patent No. 3,519,339 issued to Thomas J. Hutchinson and James J. Dolan of Providence, R.I.

—A coat heated by batteries in two inside pockets. The heating element, made of material used for space capsule cones, goes around the waist. A control switch is mounted in the buckle which will permit the temperature to be raised as much as 34 degrees. The batteries are expected to last a couple of weeks in normal cold weather use. Patent No. 3,519,791 issued to Mark T. Basseches and Ely S. Margolis, New Rochelle, N.Y.

—A water cannon for breaking rocks, tunneling and similar heavy industrial work. A piston moved by compressed air forces a rod into a chamber filled with water, creating a shock wave and sending a powerful jet out through a nozzle with each strike. The cannon, developed primarily for subterranean mining and tunneling, is thought to be capable of producing pulsed jets of water with pressure up to a million pounds to the square inch. Patent No. 3,420,477 issued to William C. Cooley, Rockville, Md.

—A safety belt for automobiles. The seat belts for automobiles have an electrical conductor connected through the ignition to the drive positions of the transmission shift lever to prevent the vehicle from operating when the seat belt is uncoupled. Patent No. 3,521,723 issued to Robert U. Snodgrass, Arlington, Texas.

Abstracts and drawings of patents are published as they are issued in the Official Gazette *of the United States Patent Office, each Tuesday.*

—Patent Office

OCTOBER 19, 1970

International Commerce

- How U.S. fares in 45 major markets
- 'Go Global' drive accelerates
- Mission checks Benelux EDP market
- Canada shakes off sluggishness
- Effect of change in Libya

International Trade Winds

Company News

ESCALATORS — Travolators, moving walks by Otis Elevator Co. of New York which can carry 8,000 persons at 90 feet per minute, are being installed in major world airports: at Heathrow Airport near London; Orly and Roissy airports, Paris; Kastrup, Copenhagen; and Jan Smuts, Pretoria.

INDUSTRIAL FURNACES — Midland-Ross Corp. of Cleveland has received two contracts totaling approximately $3.5 million to design and supply three vertical shaft furnaces for oxide pellet plants. La Societe de Exploitation des Mines du Rif near Nador, Morocco will acquire two furnaces with a combined capacity of 850,000 tons of pellets annually; Luossavaara-Kiirunavaara AB of Malmberget, Sweden has ordered a 500,000 ton per year furnace. The facilities will serve European steel producers and installation will begin in early 1971.

CONSTRUCTION EQUIPMENT—Koehring Co., Milwaukee, announced an agreement for merger with Bopparder Maschinenbaugesellschaft mbH (BOMAG), Boppard-Rhine, Germany. BOMAG, with annual sales of $16 million, was an innovator of dual drum vibratory compaction equipment used in a variety of construction projects and maintains manufacturing and sales facilities around the world. Koehring is in the light compaction and construction equipment field.

BEVERAGES—The Uniworld Organisation, overseas branch of International Industries, Inc., Beverly Hills, Calif., is opening through franchise the first British Orange Julius units. A third refreshment stand will be opened in Amsterdam and a fourth European unit is being planned. If these units, all located in test markets, prove successful, a major sales program will begin.

MINERALS — Universal Oil Products Co., Des Plaines, Ill., announced completion of the initial phase of exploration for a nickel laterite deposit on the Island of Palawan in the Philippines. Universal entered into an agreement in 1969 with the Rio Tuba Mining Co. for exploration of the 1,665 acre site. The first phase involved mapping a nickel bearing laterite deposit which Universal believes has a possibility of containing a large body of commercial grade ore. Upon completion of the exploration, the U.S. firm will have a 40% interest.

ELECTRONICS—Work has begun on Jersey Isle in the English Channel for a $1 million RCA plant expanding the company's European commercial electronic activities. The new structure will provide quarters for RCA's growing business in color TV tape recorders and technical equipment for broadcasting. RCA Jersey Ltd., which will operate the plant, is an affiliate of RCA, New York; Jersey's business guidance is provided by RCA Commercial Electronic Systems Division, Camden, N.J.

Newsmemo

How opportune are the World Trade Opportunities carried in this magazine? Here's the record for the past fiscal year, now collected from Foreign Service reports: better than one in every four led to a business success for a U.S. firm. The leads offered by specific businessmen overseas resulted either in sales contracts, agency agreements or active negotiations in 28% of the cases. In instances where sales figures were reported, the average deal was $23,000. Each sales opportunity published brought an average of five replies by U.S. firms.

Talk about population explosions . . . the U.S. business community in Singapore has tripled in the past three years, to a current total of about 5,500 persons. At the end of 1967, about 60 U.S. companies were registered there, mainly in marketing activities. Today's total is 262, with activities in manufacturing, marketing, distribution, refining and oil exploration. A significant byproduct is the rise in imports from the U.S. Singapore now gets 10.2% of its imports from the U.S. compared to 7.4% a year ago.

But this optimistic note from Asia is countered by a warning sounded by Borden's Sean Connolly, who was on a Commerce-assisted trade mission to the Far East last year: "Our competitors are in my opinion doing a better selling job all over East Asia than we are doing, in spite of the fact that it is widely recognized that American technology and American equipment is generally conceded to be superior in every way. It is in selling, representation, service, financing and personal contact that we are losing the battle."

The U.S. world trade community has a chance to speak out on American policy concerning the United Nations. As part of the 25th UN anniversary a Presidential Commission is holding public hearings and inviting individual opinions, at Atlanta Oct. 19, St. Louis Oct. 20, Des Moines Oct. 21, and Rochester, N.Y., Oct. 26. Portland, Ore., Nov. 18, and San Francisco Jan. 12.

An important group of potential overseas buyers of U.S. products has grown to record numbers—the foreign students now on American campuses. In the peak total of 135,000 students from 172 lands are 29,731 enrolled in engineering and 15,587 in business administration. In these categories, particularly, exposure now to first-class American equipment will be a factor in later sales dealings overseas.

NOTE: This column previews or underlines special aspects of world trade developments, with a particular focus on Bureau of International Commerce export and investment promotions. It is not intended to substitute for the detailed reporting and analysis in our regular news columns.

Half Of Top Markets Show U.S. Share Gain

A large majority of the 45 leading U.S. markets reported higher imports from this country during the latest 12 months for which data are available. Over the same period, the U.S. share expanded in half these countries, reflecting our best export performance in recent years.

U.S. exporters similarly improved their position in sales to our ten principal customers. Our share strengthened considerably or held virtually steady in six of these markets and weakened only moderately in the others. Especially notable were the sharp advances in the U.S. standing in the Japanese and the French import markets.

Almost all of our principal trading partners reported higher inflows of goods from abroad, as shown in the accompanying table. With economic activity expanding rapidly, most developed countries continued to increase their imports at exceptionally high rates, generally ranging between one-sixth and one-fourth. Germany and Japan led the main trading nations in this respect. As the German economy continued to operate at near capacity levels, there was a greater dependence on foreign sources for steel products, nonferrous metals, and various types of machinery. Japanese imports also advanced vigorously, bolstered by expanding arrivals of machinery, industrial supplies, and aircraft.

Italy and the Netherlands each increased their purchases abroad by slightly more than one-fifth. The sustained growth of Italian imports stemmed primarily from heavy stockbuilding and an acceleration in consumer demand in response to wage increases following settlement of the work stoppages in the closing months of 1969. The intensification of Dutch business activity continued to generate a rising demand for goods from abroad. Several of the smaller West European trading nations also reported rapidly expanding imports. Finland boosted purchases by nearly one-third, while Switzerland and Spain were not far behind.

In contrast with the widespread, sharp expansion in imports among industrialized nations, the United Kingdom, France, and Canada reduced the growth rate of their foreign purchases during the latest 12 months. The moderate increase in British imports reflected the dampening effect of the government's policy of managing demand. The continued deceleration in Canadian receipts, on the other hand, was in large measure traceable to sluggish consumer demand and investment spending. French imports slowed significantly following the government's efforts to maintain stability in the economy.

With generally improved reserve positions, the large majority of developing countries stepped up expenditures abroad. Several countries in the Far East absorbed considerably greater quantities of foreign goods. Singapore and Taiwan boosted purchases by more than one-fourth, and Hong Kong and the Republic of Korea by only a slightly lesser degree. On the other hand, Argentina was the sole Latin American country to experience a surge in total arrivals. Elsewhere, Nigerian imports advanced by one-fourth, swelled by higher receipts of equipment for the oil industry. The substantial increase in Israeli foreign purchases extended mainly to defense material and, to a lesser extent, to consumer and capital goods.

Only a handful of developing countries reported a cutback in imports. India reduced its intake of goods from abroad by one-tenth, as its requirements for foreign food grains fell sharply, while Pakistan, Iran, and the Philippines all registered more moderate declines.

Virtually all industrial nations as well as most of our leading outlets in developing regions increased their imports of U.S. goods during the latest 12-month period. Our standing relative to the other major suppliers improved in fully half of these markets, with the gains almost equally divided between the developed and the developing areas.

Accelerating its purchases from the United States, Japan led the import expansion among our top ten outlets. Higher shipments of aircraft, primarily the new jumbo jets, machinery, coal, and iron and steel scrap accounted for a significant portion of the 37% rise. The increase was substantial enough to generate a sizable advance in our share of that market.

U.S. firms again supplied a large share of the sharply growing German import market. Rising requirements for steel and computers and deliveries of the giant jets contributed appreciably to the one-third gain in purchases from this country. Our market standing improved significantly also in France following a 20% increase in purchases of U.S. goods, twice the advance in imports from all sources. Steel, computers, and aluminum were largely responsible for the growth.

In our remaining top ten outlets,

The World Market Report, pages 37-39, continues for readers of* Commerce Today *a summary—published quarterly in* International Commerce *—on the value of total imports into all of the major free-world foreign markets for which current statistics are available, and the U.S. share of those markets. The report is prepared by the International Trade Analysis Division of the Bureau of International Commerce.

our performance was less striking. Despite a 19% rise in Dutch purchases and a 16% expansion in Italian receipts from U.S. sources, our share drifted downward in both markets. It slipped also in Britain and Canada as both countries recorded only modest increases in imports of our products.

Rising more than twice as fast as total arrivals, Spanish purchases of U.S. goods advanced by one-half. Soybeans, iron and steel scrap, and steel products accounted for a large portion of the increase. Our share of the Swiss market also rose sharply on the strength of a two-fifths expansion in imports from the United States. Aircraft, electric machinery, organic chemicals and nonferrous metals contributed significantly to the rise. In addition, our marketing position improved in Austria, South Africa, New Zealand, and Turkey, as each country recorded increases in expenditures in the United States ranging between a third and a fourth. On the other hand, our relative standing deteriorated in all the Scandinavian countries despite stepped-up imports of U.S. goods.

With a one-fourth reduction, Greece was alone among developed countries in curtailing imports from the United States. A cutback in aircraft arrivals markedly lowered our share of that market.

Among developing countries, Singapore recorded by far the largest increase in purchases of U.S. products. Sustained by a considerable expansion in shipments of transistors and other semiconductors, construction and mining machinery, and cooling apparatus, imports surged by more than two-thirds. This rate of growth was twice as fast as the rise in total purchases. Our market share advanced much more moderately in Argentina and in Korea, both of which raised their intake of U.S. goods by about one-third. Nonelectric machinery and aircraft accounted for a predominant part of the advance in shipments to Argentina; wheat and cotton, in those to Korea.

World Market

The 45 markets below accounted for 90% of 1969 imports into all

Values in millions of dollars — Published

Country	1969 Imports			1970 Imports January through latest month				Import change in latest available 12-month period*		Reserves at end of second quarter	
	From world	From U.S.	U.S. share %	Latest month	From world	From U.S.	U.S. share %	From world %	From U.S. %	1969	1970
Germany, W.	24,926	2,618	10.5	July	17,184	1,892	11.0	+24	+32	10,158	8,816
United Kingdom	19,956	2,703	13.5	July	12,314	1,656	13.4	+ 4	+ 3	2,443	2,791
France	17,373	1,466	8.4	July	11,107	1,112	10.0	+10	+20	3,611	4,447
Japan	15,025	4,094	27.3	June	9,084	2,711	29.8	+25	+37	3,129	4,084
Canada	14,293	10,384	72.7	July	8,433	6,135	72.7	+ 6	+ 5	2,961	4,333
Italy	12,450	1,411	11.3	June	7,274	799	11.0	+21	+16	5,149	4,680
Netherlands	10,992	1,067	9.7	June	6,449	630	9.8	+21	+19	2,366	2,683
Belgium-Lux.	9,989	766	7.7	June	5,564	468	8.4	+17	+30	2,211	2,598
Sweden	5,899	505	8.6	June	3,501	320	9.1	+19	+12	591	645
Switzerland	5,286	448	8.5	July	3,749	335	8.9	+26	+40	3,220	3,868
Australia	4,545	1,138	25.0	June	2,426	571	23.5	+12	+ 9	1,590	1,723
Spain	4,234	728	17.2	July	2,826	521	18.5	+23	+51	915	1,056
Denmark	3,799	293	7.7	July	2,496	192	7.7	+18	+13	372	342
South Africa	3,291	571	17.3	Mar.	864	137	15.8	+19	+28	1,557	1,346
Norway	2,943	230	7.8	July	1,995	151	7.6	+21	+ 5	657	668
Austria	2,825	84	3.0	July	1,986	71	3.6	+22	+36	1,413	1,540
Hong Kong	2,457	330	13.4	July	1,610	223	13.9	+22	+29	[1]	[1]
Brazil	2,242	[2]674	[2]30.1	....	.....	.....	....	+ 5	− 2	377	1,011
Yugoslavia	2,135	92	4.3	May	971	37	3.9	+15	+ 7	161	237
India	2,129	622	29.2	May	868	269	31.0	−11	+ 7	838	1,117
Mexico	2,076	1,297	62.5	....	.....	.....	....	+ 6	+ 5	673	[3]718
Singapore	2,040	161	7.9	June	1,168	119	10.2	+29	+69	[1]	[1]
Finland	2,023	103	5.1	June	1,195	54	4.5	+31	+ 7	295	401

Note: The countries shown above include the 45 major importers of U.S. merchandise in 1969 for which current data are available. In order to present comparable statistics for all countries, import data have been adjusted from an f.o.b. valuation to a c.i.f. valuation for Australia, Canada, the Republic of South Africa, and Venezuela. Reserves include official holdings of gold and foreign exchange, the gold tranche position, and, beginning January 1970, Special Drawing Rights (SDR's) in the International Monetary Fund.

* Compared with preceding 12-month period.

Hong Kong's imports from the United States expanded by nearly 30% as our standing improved also in that market. Higher deliveries of computers and parts, principally for assembly, were mainly responsible for the rise. Israeli purchases of U.S. products edged upward slightly faster than those from all sources as they rose by one-fourth. Defense materials were the prime movers in this expansion, although feed grains also played a role. In India, our share also improved, as increased arrivals of cotton, food grains, and iron and steel plates contributed to the overall advance.

Both Taiwan and Nigeria raised their expenditures in this country by about one-sixth. While soybeans and organic chemicals made up the bulk of the increase in Taiwan's purchases, Nigerian imports rose primarily on the strength of larger arrivals of pumps, construction machinery, and other materials used in oil fields. Our share was, nevertheless, reduced in both markets.

Three developing countries reported strong to moderate reductions in the inflow of our goods. Iran and Pakistan cut back imports from the United States severely as the first country continued to follow a policy of restricted spending on nonessential imports and the second faced a general slowdown in business activity. The

Report

Bureau of Int'l Commerce

free-world foreign markets and 91% of imports from the U.S.

quarterly

Country	1969 Imports			1970 Imports January through latest month				Import change in latest available 12-month period*		Reserves at end of second quarter	
	From world	From U.S.	U.S. share %	Latest month	From world	From U.S.	U.S. share %	From world %	From U.S. %	1969	1970
Korea, S.	1,824	530	29.1	June	873	254	29.1	+20	+32	412	602
Venezuela	1,709	838	49.0	....	....	....	....	+ 1	— 3	851	985
Greece	1,594	152	9.5	Mar.	466	27	5.8	+ 7	—23	268	278
Argentina	1,576	346	21.9	Feb.	240	60	25.1	+32	+34	722	707
Ireland	1,413	126	8.9	June	766	59	7.7	+13	+13	542	712
Iran	1,384	196	14.2	Jan.	111	13	12.0	— 4	—23	295	261
Israel	1,318	311	23.6	May	608	147	24.3	+19	+24	542	441
Philippines	1,254	358	28.5	June	596	173	29.0	— 6	—11	138	196
Thailand[4]	1,238	230	18.5	Mar.	324	43	13.3	+10	+12	1,024	978
Portugal	1,231	61	4.9	July	741	57	7.6	+12	+15	1,362	1,371
Taiwan	1,213	292	24.1	May	557	134	24.0	+27	+15	411	531
Pakistan	1,011	246	24.3	June	503	133	26.4	— 2	—20	316	291
New Zealand	1,003	121	12.1	June	582	79	13.7	+18	+24	165	170
Turkey	754	128	17.0	May	415	78	18.8	+11	+23	149	218
Nigeria	693	82	11.8	Feb.	156	22	14.0	+25	+17	135	157
Colombia	686	300	43.7	....	...	...	....	+ 7	— 7	164	280
Libya	676	126	18.7	....	...	...	....	+ 5	+16	924	1,473
U.A.R. (Egypt)	622	[2]46	[2]7.5	....	...	...	....	— 7	+25	209	136
Peru	601	186	30.9	June	293	93	31.7	+ 9	+ 9	155	[5]255
Trinidad, Tobago	483	71	14.7	May	209	25	12.0	+14	+ 3	50	44
Jamaica	443	185	41.8	....	...	...	....	+16	+25	144	[6]176
Costa Rica	244	[2]85	[2]34.8	....	...	...	....	+14	+ 5	31	33

[1] Not available. [2] Estimated from partial year data. [3] End of May. [4] Port of Bangkok only. [5] End of March. [6] End of April.

Source: Official trade statistics of listed countries.
International Monetary Fund, *International Financial Statistics.*

one-tenth fall in Philippine purchases affected mainly aircraft and grains. In each of these three countries the decrease in arrivals from U.S. sources exceeded the reduction in total imports.

As of June 30, 1970, the principal trading partners of the United States held $59.4 billion in official reserves, more than 10% above the level a year earlier. Roughly half the increase is attributable to the allocation of Special Drawing Rights by the International Monetary Fund on Jan. 1 of this year. Reserves of the developing countries, one-sixth of the total, grew nearly three times as fast as those of the developed nations from mid-1969 to mid-1970.

Canada was the leading gainer, boosting its reserves by nearly $1.4 billion to surpass both Japan and Switzerland. A substantial trade surplus and a strong influx of long-term capital were responsible for the increase. Despite a sizable outflow of long-term capital, Japan recorded another resounding rise in reserves for a gain of $955 million. The nation's trade surplus remained exceptionally high and short-term capital inflows rose.

Among European countries, France and Switzerland reported the largest increases in official holdings. With the devaluation of the franc in August 1969 as a springboard, France improved its reserve position by over $800 million and was also able to repay a significant portion of its short-term debts. Despite a widening trade deficit, Swiss holdings went up by nearly $650 million, reflecting in part greater proceeds from tourism, investments, and banking.

Belgium-Luxembourg, the United Kingdom, and the Netherlands also increased their reserves substantially. Britain, in addition, markedly cut its outstanding debt as the trade balance showed a surplus and as renewed confidence in sterling attracted considerable short-term capital.

The large loss in German reserves, amounting to $1.3 billion, reduced that country's holdings to $8.9 billion, almost exactly where they stood two years previously. This sharp drop reflected principally the massive outflow of short-term capital following revaluation of the mark last year. The German trade balance remained remarkably strong. With imports rising much faster than exports, largely from widespread labor unrest and rising costs, Italy's trade account swung into deficit and reserves fell by more than $450 million.

Brazil led all developing countries in expanding holdings as its reserves nearly tripled to over $1 billion. Heavy inflows of capital and a solid export performance, supported by strengthening coffee and, especially, cocoa prices, figured prominently in the increase. Several other Latin American countries also recorded sizable gains in reserves. Elsewhere, Libya's holdings grew by well over half, primarily from oil revenues, while India boosted reserves above the $1 billion mark by expanding exports and curtailing imports.

Israel was the only developing country whose reserve losses exceeded $100 million. Increasing imports, coupled with dwindling capital inflows, accounted for the drop in Israeli holdings.

'Go Global' Export Drive Picks Up Illustrious Sponsor

Commerce's 'Go Global' Marketing Program is getting a publicity boost from an unusual source—Uncle Sam himself! The venerable old gentleman is making personal appearances in a trade publication serving the electronics industry (see photo, page 35), announcing the completion of the program's first Global Marketing Survey.

He's even offering to have one of the young whippersnappers who dreamed up the whole program call on any firm which exhibits an interest in the EDP survey.

One non-mythical figure who has backed up the invitation is Massachusetts Governor Francis Sargent, who declared Oct. 15 as 'Go Global' Day in his state, and was scheduled to be the luncheon speaker at one of top events highlighting the statewide observance. In addition to hearing the Governor, participants at the event at the Hanscom Air Force Base Officers Club in Bedford were due to hear an export marketing panel session.

This spurt of activity coincides with the publication of the first Global Market Survey, the Go Global Program's basic document, which contains precise marketing data on the electronic data processing equipment market in 25 countries.

Why EDP? Because 1969 saw $3 billion in data processing equipment leased or sold in 25 overseas markets which are growing by about 20% a year.

The EDP Global Market Survey identifies specific market opportunities over the next five years for mainframe equipment, peripheral devices and software in 25 countries. It contains a complete analysis of each country, identifying computer population, end-user groups, outlining planned new systems, and listing products having the best sales potential. It studies market characteristics such as local production, import and export history, and distribution methods and trade practices. Finally, the reports spell out proven market development techniques and recommends specific promotional techniques.

In addition to the information contained in the survey, Commerce will supply an international trade specialist to help formulate a global marketing program geared to an individual firm's specific needs. These men know the pitfalls and the shortcuts—they've been there many times before. Among other things, they can steer firms to participation in any of the 370 shows, congresses and other promotional events listed in the survey. They can also provide a full range of other export promotion services, including lists of foreign firms dealing in specific kinds of EDP products, overseas agents and distributors, and reports on the commercial activities of foreign firms.

But, let Uncle Sam tell it from his message in *Computer World*: "You have a standing invitation to add one of these international trade specialists to your marketing team in a person-to-person relationship, day in and day out. You can reach him at the nearest Commerce Department Field Office, where, for the next two years he will be seeking export opportunities for your products.

"The Global Marketing Program is for you—a personal, cooperative effort between my people and yours. The time is now! Contact me and I'll have one of my representatives personally present you with a copy of the EDP Global Market Survey."

A stern taskmaster, the old boy already has his people drawing up further 'Go Global' programs for food processing and packaging equipment, instrumentation, air conditioning and refrigeration, agricultural equipment, and pumps, valves and compressors.

TEASER AD—*This notice led up to the "Go Global" announcement shown on Page 35.*

TALKING COMPUTER LANGUAGE—*Trade mission member Robert S. Modine, Jr. (r.), director of systems engineering for the COMPAT Corp. in Westbury, N.Y., discusses a "hybrid mass memory peripheral" with a businessman in Amsterdam.*

EDP Mission Sees Markets in Belgium, Netherlands

They saw executives of banks, insurance companies, government agencies and merchandising concerns in Brussels and Amsterdam. They expect about $6.4 million in sales over the next year, and one company signed a contract for a single $137,500 sale. They found that U.S. technical superiority is still wide enough to provide the edge that opens the doors to buyers.

So reported a five-firm U.S. trade mission specializing in electronic data processing equipment, just back from Belgium and the Netherlands. In sum: the markets there are excellent for the whole spectrum of EDP items and services, but the competition is formidable.

In Belgium, the market for EDP equipment is expected to exceed $90 million by 1974, according to Mission Director W. Bruce Curry, who heads the Commerce Department Field Office in Jacksonville. The United States was the largest supplier of such imports to Belgium this past year, with 22% of the total, he points out; by 1974, this share is expected to increase to 25%.

In Belgium, Director Curry says, EDP service bureaus are localized in nature, confined largely to the Brussels area. Many are interested in joint ventures. Time-sharing services, now offered only on a limited basis by Belgian firms, are on the threshold of dramatic expansion. As the use of computers becomes more widespread, he reports, opportunities will increase for U.S. firms offering facilities-management services—a concept little known in Europe.

Of the Netherlands visit, Curry said that the mission found the Dutch business community "keenly attuned to the benefits offered by EDP as a source of relief to rising labor costs." The Netherlands market for EDP hardware is expected to increase by about 100% in 1974 over 1969, he says, from $39 million to $79 million; and the United States will have to intensify its efforts to retain the 30% of this market it held in 1969.

The Government's intent to greatly increase its use of computers, the increasing size of Dutch firms, and the businessman's "above-average grasp of the application of EDP systems" to his firm's operations all add to the attractiveness of this market, Curry says.

In addition to the director, mission members were: Charles H. Doersam, Jr., Com-Comp, Inc., Hauppauge, N.Y. (which made the $137,500 sale, to a Belgian university hospital); Carlo Loi, Computer Data Systems, Inc., Silver Spring, Md.; Shlomo A. Hagai and Michael Freccia, Philips Data Processing, Inc., New York; Robert S. Modine, Jr., Compat Corp., Westbury, N.Y.; and Robert H. Shadley, Spar Ribbon & Carbon, Inc., Orlando, Fla.

Specialized trade missions are organized by the Commerce Department, which pays operating costs and furnishes a director. Members pay their own expenses and do business for their own firms.

Three earlier EDP missions have gone abroad under the Commerce Department's specialized missions program—two to Europe in 1969, and one to Southeast Asia last spring.

Commerce World Trade Specialists Now Serve Public In Six Groups

In a move aimed at improving its lines of communication with the U.S. international business community, Commerce Department's Bureau of International Commerce (BIC) has been reorganized. Its staff will now function in six offices.

The **Office of International Commercial Relations** incorporates the former Office of International Regional Economics and Office of Foreign Commercial Services. Its units are: the Foreign Commercial Services Staff, International Trade Analysis Division, Africa Division, American Republics Division, Western Europe Division, Far East Division, Near-East South-Asia Division, and Eastern Europe Division.

The **Office of International Trade Promotion** has placed its various promotional programs in three groups. In Export Development are the Export Market Identification Division, Export Sales Campaign Division and Joint Export Activities Division. Commercial Exhibits includes the Commercial Exhibits Division and the Exhibits Design Division. Export Services has the Developing Countries Trade Promotion Division, Commercial Intelligence Division, Trade Missions Division, and Export Business Relations Division.

The **Office of Export Control** now has the following eight divisions: Policy Planning, Operations, Export Clearance and Facilitation, Investigations, Technical Data, Capital Goods, Production Materials and Consumer Products, and Scientific and Electronic Equipment.

The **Office of International Investment** has five divisions: International Finance, Investment Policy, Domestic Investment Services, Foreign Investment Services and Foreign Business Practices.

The **Office of International Trade Policy** has four divisions: General Trade Policy, Legislation and Tariff Analysis, Trade Negotiations, and Transportation and Insurance.

The **Office of International Business Assistance,** which carries on a program newly offered by BIC in 1970—that of assistance to companies experiencing Government-related problems on major foreign projects or transactions—now is organized in five staffs: Project Research, Military Exports, Transportation Systems, Infrastructure Systems and Industrial Systems.

BIC itself was part of a departmental reorganization last month when Commerce Department's Domestic and International Business area was consolidated into two major bureaus reporting to Assistant Secretary Robert McLellan. The other such bureau is the Bureau of Domestic Commerce (BDC), which combines the former Business and Defense Services Administration (BDSA) and the Office of Field Services.

BIC is directed by Harold B. Scott, who is also a Deputy Assistant Secretary of Commerce and National Export Expansion Coordinator. BDC is directed by William D. Lee, the former BDSA Administrator, who is also a Deputy Assistant Secretary of Commerce.

Sees Improved East-West Links As Visit Result

Better business communications links that can lift the level of U.S. commercial activity in Eastern Europe may follow talks by Commerce Department officials with counterparts in the Bloc countries.

Harold B. Scott, Director of the Bureau of International Commerce, offered this summary to the Washington Foreign Law Society in describing a June visit he led to the Bloc countries (for earlier report, see *International Commerce,* Aug. 10, pages 2-4). He made these comments:

"Generally, we established the Commerce Department as a communication point for relaying mutual business interests between the Socialist countries' governments and the U.S. counterparts. Given the lack of commercial infrastructure (no Commercial Attaches in U.S. Embassies, few local agents or distributors, and little published market data), this communication factor alone should be useful.

"More specifically, we in Commerce are analyzing more than 100 products produced in Eastern Europe to determine their U.S. potential. For those that show promise we are assisting the producers in locating qualified distributors or co-venture partners. Also, we are making available to them U.S. market data that we collect.

"On the other side of the coin, from each country visited, we obtained so-called shopping lists consisting of major technology or plants which each country is interested in buying or co-venturing. Using these shopping lists we are making contact with qualified American companies to determine interest and arrange introductions. We are trying hard to be an effective broker.

"Finally, we are undertaking a major effort to normalize our usual commercial intelligence services so that we can give to the U.S. business community the same type of information on Eastern Europe as is available about other major markets. While this seems a minor step, it will take time and persuasion before we receive a meaningful flow of information because of the difficulty of obtaining this information and the reluctance of the Bloc to reveal significant market data."

Trade Fairs, Centers

Four U.S. Trade Centers In Europe Open Early '71 Shows To Companies

British industry is spending about $300 million annually to train its workers, and market research indicates a continuing high sales potential in the United Kingdom for advanced audiovisual equipment and software related to both industrial and business management training.

To help U.S. manufacturers in this major market, an exhibition of training aids for business and industry at the U.S. Trade Center in London is scheduled Feb. 22-26.

Britain's Industrial Training Act of 1964, which provides for levies on industry to support industrial training programs, boosted training levels by 25%. Industrial training programs have a constant enrollment of more than 1.4 million workers, including 500,000 apprentices. Seven hundred technical colleges and 30 polytechnical schools enroll more than 1.6 million students.

The following advanced hardware products, with software adapted for British use, have high sales potential: computers (including computer-assisted instruction, dial access information retrieval systems using closed-circuit television, educational software, and time-sharing educational computer systems); and consultant services in training systems and software design.

Further information is available from the Department of Commerce, BIC-942, Washington, D.C. 20230 (202-967-4461) or from any Commerce Field Office.

Electronic Components

Electronic equipment manufacturers in Scandinavia last year boosted their purchases of U.S. electronic components by 35% over 1968 totals to a new level of $35 million. To increase the U.S. share of this market, an exhibition is planned at the U.S. Trade Center in Stockholm, Feb. 22-27.

Nordic equipment makers import nearly all their electronic components which this year are expected to be worth $200 million—up from $172 million in 1968—and total 1970 output of Scandinavian electronic equipment manufacturers should be worth about $1 billion.

Growth in output of this equipment is based on the large Swedish military market and demands in all four countries for computers, commercial and industrial electronics, color TV, and stereo hi-fi equipment.

Write the Department of Commerce, BIC-946, Washington, D.C. 20230 (202-967-3713) or contact any Commerce Field Office.

Finishing, Surface Treatment

American manufacturers desiring to take advantage of an expanding metal finishing and surface treatment market may participate in an exhibition at the U.S. Trade Center in Milan, March 8-13.

Metal finishing and surface treatment expenditures by Italian industry are expected to increase rapidly in the next few years after reaching an estimated $25 million in 1969.

The growth of these Italian markets research notes, stems from the rise of the Italian household appliance industry to the position of the third largest in the world.

Potential sales exist for the following products: spray painting and coating equipment; specialized plating solutions; industrial finishes; chemical etching equipment and solutions; advanced test instruments; and small pumps.

Write: Department of Commerce, BIC-944, Washington, D.C. 20230 (202-967-3944) or contact any Commerce Field Office.

Measuring, Recording

The demand for measuring and recording instrumentation in the Federal Republic of Germany has soared 40% in the past three years expanding an already attractive market for American manufacturers. Helping American industry boost its share of this rapidly growing market will be an exhibi-

BUSINESS TALK—*Frankfurt's March measuring and recording show follows a successful May '69 high frequency and microwave test and measuring equipment display, which included the booth of Texscan Corp., Indianapolis, above.*

EPECON '70—*U.S. Ambassador to Canada Adolph W. Schmidt takes a closer look at an electronic bonding device.*

ENGRAVERS — *High speed engraving equipment shown in Toronto at Epecon '70 drew top notch customers.*

tion of analog and digital measuring and recording equipment at the U.S. Trade Center in Frankfurt, March 15-19.

Market research discloses the German market for measuring and recording instrumentation climbed from $120.4 million in 1967 to $168.3 million in 1969.

In 1969, U.S. manufacturers increased their sales in Germany 46 percent to almost $12 million. This total was more than one-third of Germany's 1969 imports, valued at $33 million, and was 7 percent of total German consumption of measuring and recording equipment, valued at about $168 million in that year.

The research indicates that sophisticated, high precision U.S. equipment dominates several areas in the measuring and recording instrumentation field.

Examples cited in the studies include a 60 percent U.S. share of the $9 million market for digital indicating devices, a 50 percent share of the estimated $5 million market for digital counters, and 60 percent shares of the estimated $2 million markets for biomedical recorders, industrial oscillographs, and light beam and UV oscilloscopes.

Write the Department of Commerce, BIC-938, Washington, D.C. 20230 (202-967-3088) or contact any Commerce Field Office.

Canada Hosts First U.S. Show; Projects $1.7 Million In Sales

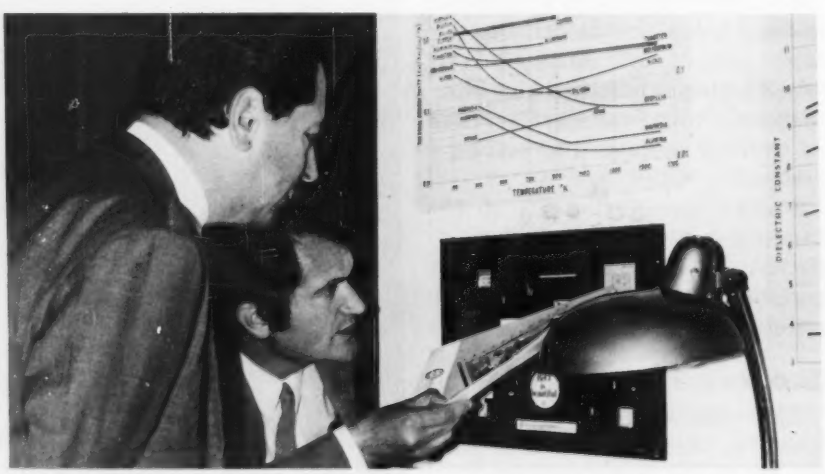
Seven agents were appointed to represent American companies in Canada during Epecon '70, a U.S. solo exhibition in Toronto and the first Commerce-sponsored show staged in America's neighbor to the north.

Forty U.S. firms mounted displays in the Sept. 28-Oct. 1 event which closed with $67,560 in book orders and projections for the coming year totaling more than $1.7 million. In addition to the seven new agents, the eight companies seeking Canadian agents/distributors were reviewing 20 candidates.

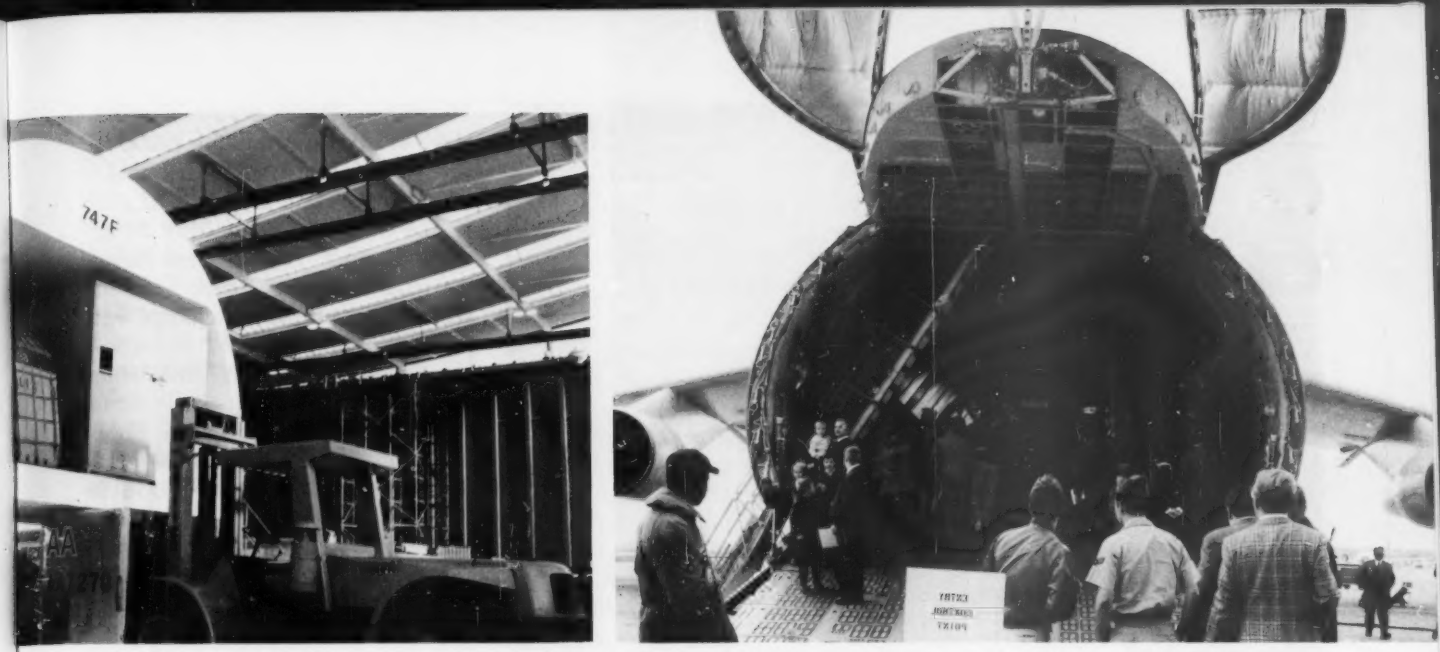
A technical conference accompanying the show drew 382 to its sessions; the exhibition registered 1,012 visitors.

Air Cargo Exhibitors See Sales At $7 Million

The world's largest aircraft maintenance hangar, at the Frankfurt Rhein-Main Airport, was the location of the second off-site exhibition by the U.S. Trade Center in Frankfurt. Staged in conjunction with the Fifth International Forum for Air Cargo, the U.S. show of air cargo



WALL CHART—*Details of Consolidated Controls equipment are illustrated on a wall chart at the hybrid circuits show in Milan.*



JET AGE—*Hyster forklifts at the Boeing booth in Air Cargo '70 demonstrated their capabilities in working with jumbo jets, left. The gaping mouth on the right is a U.S. Air Force C-5 Galaxy aircraft open for inspection at the Rhein-Main airbase.*

equipment by 28 companies reported over $7 million in projected 12-month orders.

Jumbo cargo plane mock-ups, new technology handling systems including container transportation systems, and equipment for leasing filled the hangar, larger than four football fields.

One agent was appointed during the show and ten distributor/agency agreements were under review at the show's close. During the three days the exhibition was open only to trade visitors, 1,130 attended; over 5,000 visitors were counted during the two days the show was open to the public.

Among the highest sales projections achieved were by Lockheed Georgia Co., Burbank, Calif., which expects to sell a Hercules cargo plane valued at $3.2 million.

Plastics Equipment Exhibitors At U.S. Trade Center, London, Project $2.2 Million In Orders

An exhibition of plastics equipment and materials at the U.S. Trade Center in London, Sept. 21-25, featured 23 participating companies representing 26 U.S. firms.

More than 1,300 visitors attended the show which closed with over $2.2 million in anticipated 12-month follow-on orders and $56,060 on the sales pads. Ten of the exhibitors were seeking representatives; four were contracted and negotiations were in progress with 36 other prospects.

Dimensional Plastics Corp., Hialeah, Fla., entering the British market for the first time, is projecting $100,000 in sales over the next year and anticipates that figure reaching $2 million within five years. Offering licensing rights to British concerns, the U.S. firm received 18 proposals.

New Record Set During Milan Hybrid Circuits Exhibition

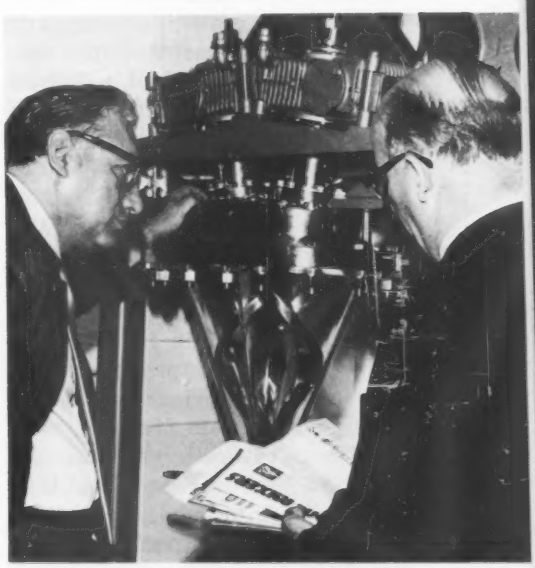
Setting a new record for the highest sales projections of any U.S.-Milan Trade Center event—$6.9 million—was the production and test equipment, materials and components exhibition for hybrid circuits.

Held Sept. 8-13, the show included 26 exhibitors representing 33 companies which wrote $312,500 in show orders. American firms interested in contacting possible representatives were negotiating with seven prospects at the show's conclusion.

For the first time in any Trade Center promotion, several of the exhibitors formed an actual operating production line, manufacturing souvenir circuits for visitors.

Registered attendance for the show reached 2,187.

DIT-MCO International, Kansas City, Mo., making its first appearance in Italy, cleared $45,000 in sales at the show and estimated first-year sales of its analyzers for testing all types of electronic circuit connections to reach $875,000.



BRITISH VISITOR—*Exhibits of plastics equipment and materials included the high viscosity-cone/vertical-mixer by Atlantic Research Corp.*

Worldwide Business Outlook

Canada Now Shows Signs Of End To Sluggishness

The economy is giving signs of recovering from its recent period of sluggish growth. There is growing evidence of success in efforts to reduce the rate of price increases but optimism is tempered by concern about unemployment and inflationary wage increases. A description of the U.S. economy? No, it's the current situation in Canada, as reported to the Department of Commerce by the U.S. Embassy in Ottawa.

The Embassy reports that Canada's gross national product is expected to grow only about 7% annually in both 1970 and 1971 to about C$ 84 million and C$ 90 million, respectively, compared to a 10% gain last year, but the price inflation component of GNP appears likely to drop from 4.7% in 1969 to about 4.0% this year and 3.5% next. This implies that real GNP, up about 5% last year, will slow to under 3% this year but pick up to about 4% in 1971.

The slower growth of output is clear from movements of the seasonally adjusted index of industrial production, which fell in July to its lowest level this year. Evidence of a declining rate of inflation comes from the consumer price index, which in August was only 2.8% above the level a year earlier, down sharply from the 5.0% rise in February. The wholesale price index has actually fallen in 1970.

The slower rise of production has contributed to an increase in the unemployment rate from 4.7% in 1969 to a seasonally adjusted figure of 5.5% in the first half of this year, to 6.7% in July and August. Unemployment is expected to average about 6% for the year and to continue at about that level in 1971.

Despite the increase in unemployment, labor-management disputes continue and wages are rising faster than prices. The average annual wage increase under agreements reached in the second quarter of 1970 was 8.5%, down from 9.4% in the first quarter but higher than the 7.9% in 1969. Although the Federal Government's Prices and Incomes Commission called for a 6% wage guideline to fight inflation, in September the Government itself settled with the postal workers for an increase of about 7% and the guidelines have been exceeded in a number of other settlements in the private sector.

Encouraged that tight fiscal and monetary policies have reduced the rate of inflation, but increasingly concerned about mounting unemployment, the Federal Government and Bank of Canada have eased their policies in stages this year to stimulate the revival of the economy. The Finance Minister in his March budget stated that the surplus for the fiscal year ending March, 1971 would be reduced to C$ 130 million from C$ 570 million in the year before. In June he announced a further reduction to C$ 30 million. Because revenues have risen slowly in a lagging economy, the surplus may well turn into a deficit by the end of the fiscal year.

The Government on May 31 announced that "for the time being" it would cease purchasing U.S. dollars to prevent the exchange rate from rising more than 1% above the par value of US$ .925 which had been agreed with the International Monetary Fund. The Canadian dollar has appreciated since then from about US$ .93 to US$ .99 in September. Exporters complained that the appreciation would reduce profits, since their sales are made in U.S. dollars and a given amount of foreign exchange would produce a lower return in domestic currency. Importers, consumers and investors purchasing imports would be better off, however, as their prices in Canadian funds declined. It may take several years before the full effects of the appreciation in discouraging exports and stimulating imports are seen.

The Government has indicated that it hopes within a year to repeg the dollar at a fixed rate below the high level reached in September in order not to discourage exports too severely. It will probably wait to repeg until the expected seasonal decline in exports during the winter months brings the rate down, although it is unlikely to fall all the way back to the previous par value.

Despite the appreciation of the Canadian dollar, exports have continued to climb this year, rising 17% in the first seven months above the level of the same period last year. The sluggish economy, however, has curbed demand for imports, which have risen only 3%. As the economy begins to recover, imports are expected to rise more rapidly, while exports tail off. Canada's trade balance, which was over C$ 1½ billion after seven months, is expected to rise to about C$ 2¼ billion for the year as a whole.

In trade with the United States, Canada had a surplus of C$ 400 million in the first seven months,

Pipeline Plans Advance

Plans for an overland pipeline system appear to be a step ahead of those for a Northwest Passage route as a means of getting Alaskan north slope oil and gas to U.S. markets. The Canadian Government has already set up guidelines for such a project. Construction costs for one oil and one gas pipeline through Canada could total $5 billion. The project would open a vast market for U.S. producers of pipe and related equipment.

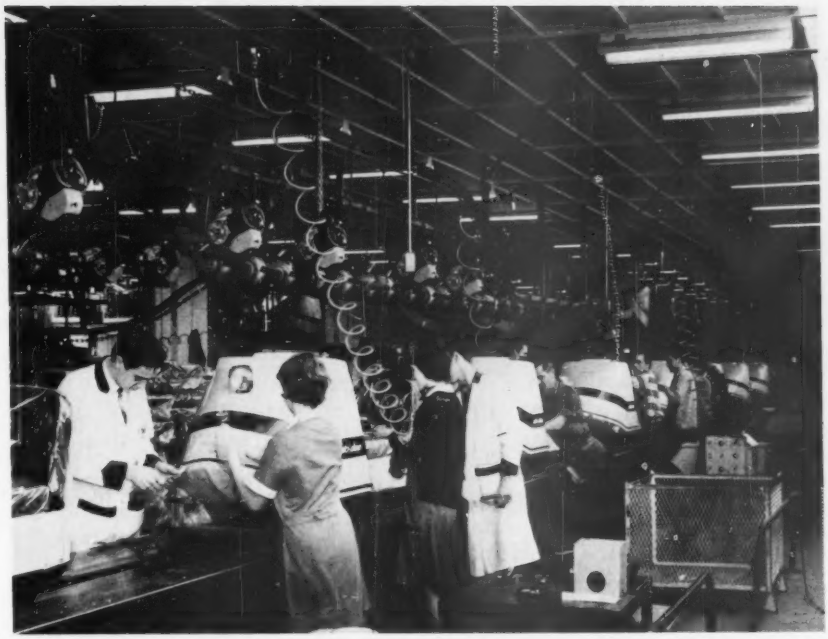
compared to one of about C$ 250 million in 1969. Out of C$ 14.9 billion of total exports last year, C$ 10.6 billion went to the United States, while imports from the United States were C$ 10.3 billion in the C$ 14.2 billion total.

Canada's balance of payments on current account is expected to be in surplus this year by about C$ 500 million, compared to a traditional deficit which last year amounted to C$ 722 million.

Current expenditures by all levels of Government rose at a seasonally adjusted annual rate of about 13% in the first half of this year, and are expected to continue at the same pace in the second half. Consumer spending, which rose only about 4% in the first half, is expected to pick up in the second for a gain of about 6% for the year. Business investment in plant and equipment dropped 3% in the first half but is expected to rise in the second, with little or no gain for the year as a whole. Inventory accumulation may drop from C$ 1 billion last year to half that this year.

Residential construction was very weak in the first half as housing starts, seasonally adjusted at an annual rate, fell to about 150,000 (210,000 last year). Lower interest rates and additional government funds are expected to stimulate housing in the second half, however, so that starts will total about 175,000 for the year. Compared with an anticipated decline this year of about 8%, housing expenditures are expected to increase in 1971 by as much as 20%, with starts again rising over 200,000.

Disinflationary policies have had a dampening effect on Canadian imports this year. In addition, continuing uncertainties about price and wage increases, labor-management relations, the exchange rate, tax changes, restrictions on foreign investment, and the economic health of the United States have made for an unsettled business tone. The growth of imports from all sources may fall off from 13.5% in 1969 to only about 7 to 9% this year, while the rate of increase for imports from the United States may be even less. Toward the end of the year, however, the general market outlook should improve as the economy begins to pick up and the upward float of the Canadian dollar makes imports relatively less expensive to Canadians than they were before under the fixed rate.



CANADA IS TOP SNOWMOBILE SELLER—*Shipments to the United States last year were valued at $111 million. Here, a Ski-Doo assembly line at Valcourt, Quebec.*

After a discouraging first half, the revised projection of private capital investment expenditures looks more hopeful for the U.S. exporter. Resource development is particularly promising, as is the efficient Canadian steel industry. Major investment projects in other industries, however, are waiting in the wings. From Ontario, for example, it is reported that 12 industrial projects worth nearly C$200 million have been stalled because of unfavorable economic conditions and unsettled government policies.

The Canadian consumer is also biding his time, especially avoiding big ticket items such as homes, cars and appliances. Recent surveys suggest that he will come back on the market in late 1970 or early 1971 with renewed interest buttressed by substantial savings and under-used credit resources. Barring a crippling strike, the new small North American cars may also by that time be successful in their appeal to buyers who, for the first half of the year, caused a 21% decline in sales compared with the corresponding period in 1969.

Two events highlight the soft market in the appliance field. The Frigidaire division of General Motors of Canada will stop producing and distributing household appliances at the end of this year. Canadian General Electric hopes to offset rising costs and competition by discontinuing superficial annual model changes in its home appliances.

Exporters of mining and ore treatment equipment should give close attention to opportunities in Canada. Government agreement late this summer to modify certain portions of its tax reform proposals relating to mining and metal processing is reopening consideration of projects that had been shelved. Two such major projects are a

C$290 million expansion of iron ore production in northern Quebec and Labrador by the American-controlled Iron Ore Co. of Canada, and a C$300 million program to increase iron ore production in northeastern Quebec by the Quebec Cartier Mining Co., wholly-owned by the United States Steel Corp. Among the other mineral developments likely to benefit from the government tax decision are coal in western Canada, potash in the Prairie Provinces, tar sands in Alberta, and metal ore deposits throughout the country.

Export demand for coal is giving a further boost to mines in British Columbia and Alberta where existing and anticipated long-term supply contracts are permitting the development of new and operating mines. To cost some C$400 million over the next two years, these programs could bring domestic production by 1975 to almost four times the 10.6 million tons produced last year.

Exporters of ore processing equipment should also benefit from the Canadian interest in processing its ores to a higher grade before export. The recent modification of the federal tax proposals promises better incentives to domestic ore processing.

Canada's steel industry, both an innovator and buyer of new technology, is continuing to expand. One survey assumes annual growth in demand at 6% and an increase in capacity of 65% to 70% in the next ten years, requiring new investment of from 3 billion to 3.5 billion dollars. For many steelmakers multimillion dollar expansion and modernization plans for the 1970's are already in motion. Nearly all of them include heavy investment in air and water pollution control equipment.

The technology, equipment and chemicals for control of pollution of all sorts are objects of mounting demand.

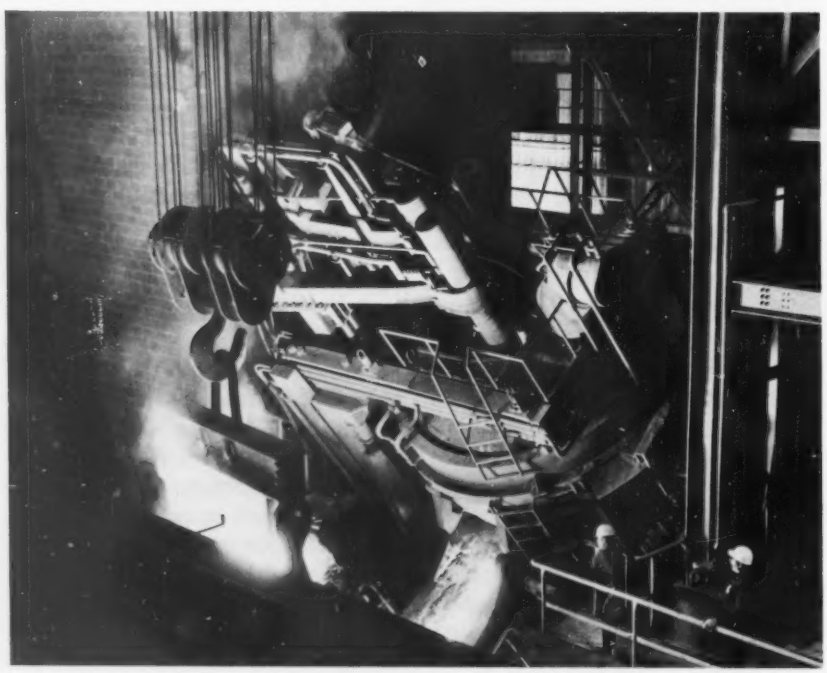
The construction of pipelines to move oil and gas has an enormous potential. Still in the planning stages are major Arctic gas and oil pipelines to link Alaskan and Canadian Arctic fields to southern Canadian and U.S. markets. The Canadian Government late this summer set up guidelines for such pipelines, indicating that only one gas and one oil pipeline, through an approved corridor, will be permitted initially. The cost of each line could run to C$2.5 billion; calls for bids for the Arctic gas pipeline may be at least two years away.

The feasibility of specially-built supertankers to transport Arctic oil through the Northwest Passage is still under consideration, but at present overland pipeline transportation plans appear to be more advanced. The market for pipe and related control and terminal equipment could be vast considering that the projected overland transport of Arctic hydrocarbons will require the largest pipeline complex in the world.

Often overlooked are export possibilities in the Atlantic Provinces of Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland. These are especially receptive market areas for American products, but they have not received adequate attention from U.S. firms. Consulates General at Halifax, and at St. John's, Newfoundland are ready to assist the visiting American businessman.

After a period of uncertainty over the business climate this spring, top bankers, investment managers, and economists in Montreal are saying today that the opportunities for investment capital to move into Quebec have not been as good for nearly two years. Accordingly, the prospects are good for an increased demand in Quebec for capital goods of all kinds.

While the United States is just holding its own in the Canadian market—though at a level which far exceeds that of the nearest competitor—Japanese exports are increasing at a high rate. In 1969 Japanese shipments of goods to Canada came to C$ 496 million and this year may reach C$ 559 million. One estimate foresees a figure of C$ 1.3 billion in 1975, which would make Japan the second ranking trading partner for Canada and move the United Kingdom into



CANADA ADDS NEW FACILITIES—*Growing demand is spurring plans to enlarge steel capacity. The furnace shown above is in a melt shop of Manitoba Rolling Mills.*

third place. Japanese exports to Canada compete with many U.S. goods; of great variety, they are almost 90% manufactured products, including motor vehicles, steel rolling mill items, television sets and other home electronic equipment, textiles, apparel and machinery.

The greatest Japanese inroads in Canada continue to be in passenger cars. Foreign cars, including Canadian-assembled Volvos and Renaults, took 22% of the new car market the first half of this year. Japanese cars beat out Volkswagen for the first time with about 37% of total foreign sales. Just recently, Japanese household appliances, large and small, have been introduced into British Columbia.

While not a new force, Canadian concern over the control outside Canada of large sectors of the economy is becoming more manifest at the federal government level. The Government is now working on an overall policy on foreign ownership which could result in a new and possibly restrictive national policy toward investment from abroad. The shape of this policy will have great significance for the United States, which is the origin of about 80% of foreign investments in Canada and the most likely source for future investment.

Indicative of growing attention in Canada to foreign ownership and the activities of the multinational corporation is a report made this summer by a special House of Commons committee on Canada-U.S. relations. Among other things, the committee recommended that it should be the general policy of the Canadian Government to require, over a reasonable time, that all companies operating in Canada permit at least 51% of their voting shares to be owned by Canadians. It does not appear at this time that the new investment policy now in the making will embody any 51% ownership target or otherwise seek to "buy back" foreign investment already established.

New Zealand, Too, Battles Inflation; British EEC Bid Casts Deep Shadow

The New Zealand economy is currently performing well but unmistakable danger signs have appeared that could weaken the country's vital foreign trade position.

That's the current economic situation as reported to the Department of Commerce by the U.S. Embassy in Wellington. Following is information offered by the Embassy to support this view.

Benefits of the 1967 devaluation are still buoying up New Zealand's external position. Despite a drought which hurt pastoral production, exports surged ahead in the 1969-70 trade year, totaling a record U.S. $1304.2 million. This increase of 16.4% over the previous year more than offset deficits in invisibles and import payments, to give a current-account surplus of $68.9 million—$12.9 million higher than for the year ended June, 1969.

Almost every indicator points to continued strong growth in production, consumption and investment during the next twelve months. Prices seem certain to go on rising, although the rate of increase may slow towards the end of the period. Taken together, the strong expansion in volume and in prices has led some economists to forecast a 10% increase in the value of GNP —the same as that in the year just ended, and faster than any since the early and mid-1950's. After deflation for price increases, this would leave a real growth rate of 5½%.

Paradoxically, New Zealand's problems stem from its successes. Record export earnings and high liquidity have encouraged heavy domestic spending and put pressure on scarce resources. Expansion of production is restricted by New Zealand's main economic problem—a severe labor shortage. The result has been escalation in prices, and wage demands, and a wave of strikes and industrial unrest unprecedented in recent history. Wage increases, without corresponding increases in productivity, are contributing to a dangerous cost-price inflationary spiral. The effects of this on trade have so far been offset by inflation in the economies of New Zealand's principal trading partners.

In an effort to counter inflation, the Government has advanced a program featuring a system of "price surveillance," requiring prior notification of price increases in basic cost-of-living items. The controversial payroll tax introduced in the 1970 budget is also intended, in part, to quiet the economy. It is too soon to judge the effectiveness of these measures. In addition, the Government is considering some form of incomes policy, short of strict wage and price controls.

In July, the Government revealed a legislative program intended to restore stability to industrial relations. The coming months will see a wide-ranging national debate and probably some amendments to the nation's basic law in the field.

Britain's renewed bid to enter the European Economic Community is casting a shadow over New Zealand's economic future. Despite progress in diversification, New Zealand remains overwhelmingly dependent on the British market for three vital exports—butter, cheese and lamb. If Britain were to enter the Community without making special provision for New Zealand, and if the Common Agricultural Policy were not modified, the New Zealand economy would suffer severe damage.

The need for a special arrangement for New Zealand has been recognized by the U.K. Government, and in varying degree by the EEC governments. New Zealand has indicated that any such arrangement must be of an enduring nature, and

not just for a short transitional period. New Zealand is now working out proposals designed to safeguard its own interests and be acceptable to Britain and the six current members of the Community.

A Shell-BP-Todd consortium has found large reserves of gas and condensate thirty miles off the North Island coast. Eventually, such reserves should provide all the fuel New Zealand can use for electricity generation and may lead to a small petrochemicals industry.

Against strong competition, the United States managed to maintain its 12% share of the New Zealand market during the trade year which ended last June 30. Japan's share held constant at 6.6%. Australia increased its share from 18.2% to 20.7% at the expense of the United Kingdom, which slipped from 47.5% to 45.2%. The outlook is for continued growth of U.S. exports to New Zealand at about the same pace. North America continued to take 20-21% of New Zealand's exports, but the U.S. share dropped from 19% to 17% in favor of Canada.

New Zealand's exports to the United States during the trade year totaled $220.8 million, while its imports from the United States were $119.3 million.

New Zealand's import licensing system has been liberalized to the point where about 70% of all imports by value are exempt from licensing requirements. In addition, during the past year the Government moved to ease internal pressures by relaxing import controls and administrative restrictions, especially on private automobiles and industrial equipment. In the June, 1970 budget it also introduced an investment allowance, increasing by 10% the depreciation allowable for tax purposes on new machinery and equipment.

While the Government has put the brakes on further liberalization for the time being, opportunities for U.S. exports have been improved, and are further enhanced by the current strong growth in the New Zealand economy. Prospects are especially good for sales of advanced machinery and equipment which will modernize industries and save labor. Fields of particular promise include metalworking and paper products machinery; both these industries are now expanding rapidly.

NEW ZEALAND RANKS FIRST—*Its position as top world exporter of dairy products will be threatened, however, if Britain joins the EEC. Here, a dry milk factory.*

New Leadership Plans Changes In Libyan Economy

Libya's economy, based on the phenomenal activity in its oil industry, continues to be one of the fastest growing in the Mediterranean basin. Gross national product rose 18% in current prices in 1969 to $2,864 million despite some loss of economic momentum in the latter part of the year. Exports last year totaled $2,165 million, of which $2,161 million was petroleum, compared with imports of $676 million. U.S. exporters, with $126 million in sales for 19% of Libya's total import market in 1969, are sharing in the increasing prosperity of the world's fourth largest petroleum exporter.

Despite this good economic showing, the outlook for Libya, and for U.S. business prospects there, is blurred somewhat by fundamental changes that have taken place in the country over the last year, according to recent reports the Department of Commerce has received from the U.S. Embassy in Tripoli.

Establishment of the Libyan Arab Republic on Sept. 1, 1969 resulted in some administrative and economic dislocation. The Libyan Five-Year Development Program, which was instituted early in 1969 and called for expenditures of $4.2 billion, was suspended pending review by the new Government. This, along with the private sector's uncertainty about the future, induced an economic slowdown, mainly in the agricultural and construction sectors.

Some of the uncertainty regarding the country's future was dispelled in May of this year when the Government announced the fiscal 1971 development budget, which called for the outlay of $560 million over the next 12 months, and indicated that a revised Five-Year Plan would be issued. This eco-

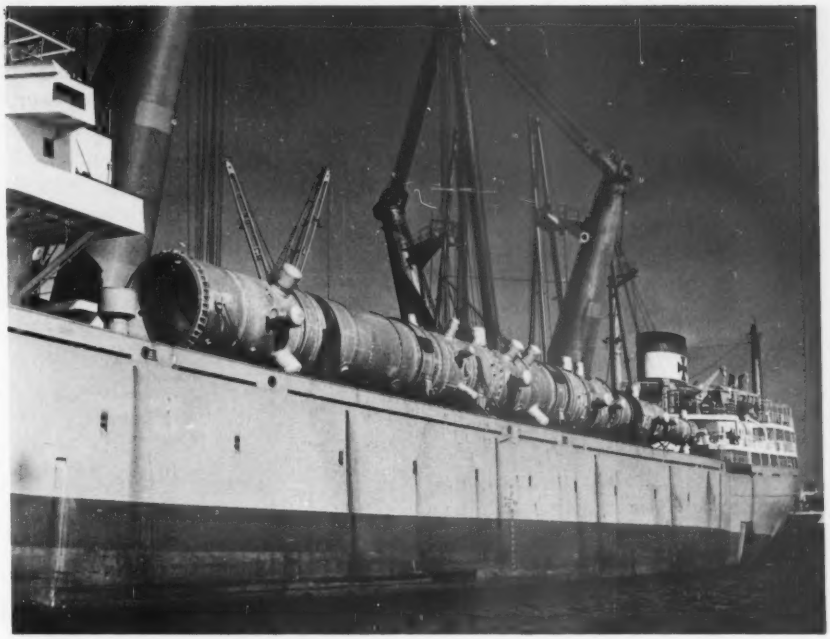
nomic shot in the arm may reflate those parts of the economy which are presently depressed and reassure the private business community in Libya that it has a role to play in the nation's economic development.

Over the long term, the Libyan development program is intended to achieve self-sustained economic growth, independent of the oil industry. Thus, during the next decade and beyond, emphasis will be on development of agriculture and other domestic industries, with the aim of making them capable of meeting the demands of Libya's domestic market and insuring the country's economic progress when oil reserves are depleted.

This emphasis on creating an autonomous economy should mean significant opportunities for U.S. exporters, but there are obstacles to expansion of the American business presence that should not be overlooked. U.S. and other foreign oil firms, for example, are currently engaged in a series of bilateral negotiations with the Libyan Government concerning the government's share of oil revenues. The outcome of these discussions will be important for Libya's economic future and for the world's petroleum markets, as well as for the foreign firms involved.

The Arab-Israeli conflict may have an effect on U.S. business opportunities in Libya. Libyan reactions to U.S. policy on the Palestine problem determine much of the over-all Libyan attitude toward the United States. There are, as yet, no direct economic consequences for the United States stemming from this, other than the Arab boycott. The French are doing better in the Libyan market, but it is uncertain whether this improved performance is due to France's Middle Eastern policy or the competitive edge gained from their last devaluation.

Another factor contributing to uncertainty over economic prospects is the trend toward Libyan control of the economy. This means that U. S. firms interested in establishing there will increasingly find that only joint ventures, with majority Libyan control, are acceptable foreign investments. Moreover, under new legislation all foreign firms in Libya must establish training programs designed to train Libyans to assume positions traditionally held by non-Libyans. Potential U. S. investors should be aware of this trend toward Libyanization and plan accordingly.



DESTINATION LIBYA—*Oil field equipment continues to be a key import of the world's fourth largest petroleum shipper, but suppliers will soon face new rules.*

For those interested primarily in exporting to Libya, Libyanization laws have also had an effect. No later than May 1971, corporations, excluding petroleum firms, must be 51% Libyan-owned while partnerships and all companies active in retail and wholesale trade and in the export/import business must be completely owned by Libyans. These laws, which are causing non-Libyans to divest themselves from businesses and have encouraged the departure of a number of experienced and skilled personnel, have created disruptions in the local business community and in distribution channels. U. S. exporters should ascertain whether their present agents and customers are affected by these laws and, if necessary, insure that new agents are appointed.

In addition, there have been a number of limited nationalization efforts, especially in the banking sector and in the petroleum marketing area. Such moves are disturbing the economic confidence necessary for business to flourish but, in time, there should be a return to normal business patterns. Because of this, and since major expenditures will be made for capital goods over the next ten to fifteen years, the Libyan market deserves close attention by U.S. exporters.

In the petroleum sector, there will be a continuing demand for capital equipment of all types including new demands likely to be generated by a U. S. $250 million natural gas complex planned for construction in Benghazi.

The major emphasis being placed on agriculture, especially on agricultural resettlement proj-

ects and on water and soil conservation, should generate a wide range of sales opportunities, especially for tractors, irrigation equipment, storage facilities, pumps, pipes, and related electrical, water drilling and control equipment.

The broadening of Libya's economic base will create a demand for a wide range of capital equipment. Prospects for U. S. suppliers would appear to be especially promising in petro-chemicals, food processing and packaging, and building materials.

Renewed emphasis on eradicating illiteracy and promoting increased technical training should mean sales opportunities for various types of educational devices.

Port expansion, the purchase of new aircraft by Libyan Arab Airlines, the modernization of existing airport facilities plus the development of new airports, as well as the upgrading of Libya's entire communications network all have been accorded high priority in government planning.

Water and sewerage projects in towns and villages and construction of new housing also have been deemed major emphasis projects in post-revolutionary Libya. This should translate into increased opportunities for sales of construction equipment, pipes and prefabricated housing.

Increasing the capacity of power generators and constructing the necessary networks and transmission lines to meet the increasing demand for electricity is a key element in Libyan economic development. A number of valuable market opportunities for suppliers of a broad range of electrical equipment should arise in connection with these projects.

Despite these opportunities, this market will not be an easy one in which to sell. Competitors from throughout Europe and Asia, fully aware of Libya's pent-up purchasing power and the government's desire to invest heavily in the country's economic future, will also be trying to establish themselves here or to capture a larger share of the market. Moreover, the trend toward Libyanization may mean that U. S. firms presently exporting to Libya will find it necessary to replace or alter existing representation arrangements.

Therefore, the message is: U. S. exporters cannot take this market for granted. They will have to be sure that their agents will still be able to do business in Libya after May 1971. In many cases, new business contacts will have to be made. There undoubtedly will be many difficulties in the months to come for firms which already are selling to Libya and also for those who want to begin selling here.

However, the medium and long-term opportunities offered by this market more than compensate for the difficulties in selling to it. Moreover, one should not lose sight of the fact that Libyan businessmen already value U. S. capital equipment and products for: 1) their high quality reputation; 2) their advanced technology; and 3) the backup engineering and technical service made available with these goods. These are very strong assets for any seller and U.S. firms should make the most of them.

High Petroleum And Mineral Output Leads Venezuela In Upward Swing

Not all economies have been sluggish in recent months. Venezuela apparently began a slow acceleration in the first half of 1970 and may be growing fairly rapidly when the year comes to a close.

The U.S. Embassy in Caracas has reported to the Department of Commerce that petroleum production during the first six months of 1970 ran at an average rate of almost 3,700,000 barrels per day, an increase of 4.5% over the same period last year. Most of the production increase has been achieved by the State-owned Corporación Venezolana de Petróleo (CVP), and by Creole (Jersey Standard), Shell and Mene Grande (Gulf).

The Venezuelan Congress has approved "service contract" bases, which will open a new era of oil exploration in Venezuela after a 13-year hiatus. Assuming the private petroleum companies present acceptable bids, the first round of contracts in southern Lake Maracaibo is expected to develop new crude oil reserves of 3 billion barrels through investments which will range around $200 million in the first few years.

Iron ore output has also increased markedly over 1969. Production for the first five months of 1970 totaled over 8,000,000 metric tons, up 23.9% from the same period last year. This increase, combined with higher world prices, upped iron ore revenues by 26.5%. Venezuelan exports to Europe, especially West Germany, have risen sharply as a result of both high world demand and labor difficulties experienced by traditional European suppliers.

Production of coal, diamonds and gold increased 30% over 1969. The world coke shortage has pushed steel production down moderately from previous levels.

Government ordinary revenues during the first six months of 1970 increased 7% over the same period in 1969. Most of this rise is the result of taxes collected on greater petroleum and iron ore production in addition to collected delinquent taxes.

The 1970 budget estimate is 4% lower than 1969 actual expenditures. Capital expenditures are 35% of the budget—the lowest percentage since 1962. Current ex-

penditures are expected to increase by 11% over 1969, with more than half of the rise resulting from wage increases for Government employees.

Bank credit and money supply continue to increase, but at diminished rates. During the first four months of 1970, money supply increased at an annual rate of 7% and bank loans at 8½%. Total deposits rose at an annual rate of 13% during the first four months of this year. Accordingly, the banking system continues to have a relatively high degree of liquidity. Central Bank gold and foreign exchange holdings at the end of June stood at $984 million. With the possibility of increased foreign borrowing later this year, such holdings should pass the $1 billion mark.

Private construction has rebounded strongly and is up 16% over 1969. Cement production is similarly up 16%. Limited revenues continues to frustrate the Government's aspiration for 100,000 new housing units per year. In a further effort to stimulate private sector housing construction, sales guaranties and additional tax incentives were recently announced.

Agricultural production continues to increase modestly. The greatest production increases have been in products such as rice and sugar, for which export possibilities are limited. Production of tropical fruits and some vegetables has increased slightly; export of these products, although still on a small scale, has also increased. One of the Government's principal goals for the agricultural sector is the stimulation of food processing and packaging for export. Private investment, both domestic and foreign, will be welcomed in this field.

The latest available statistics for manufacturing output reflect the normal seasonal drop during the first two months of the year. Recent industry reports, however, indicate that the growth of production is somewhat higher than in 1969, although still considerably below the growth rates of 1967-68.

VENEZUELAN ORE GOES TO PORT—*Increased shipments to Europe and higher world prices helped lift iron ore revenues by 26.5% in the first five months of 1970.*

Imports of capital goods during the first months of 1970 were slightly lower than during the same period for 1969.

The economy probably will increase its rate of expansion by the end of the year. Such expansion should result particularly in increased retail sales and in an even higher level of private construction. Production should also show an upward trend, although at a lower rate because of the existence of large inventories—except in automobiles, where Ford recently lost two months' production because of a labor conflict.

Equipment orders should increase, and some of the liquidity may be taken out of the banking system. A greater degree of inflation, up to now held down by decreased demand, may also begin to appear. The Minister of Mines has stated that petroleum production for the entire year is expected to be up 3%. Industry officials expect iron ore production to be up 20%. Outlook for the following year is good for both petroleum and iron ore.

The prospect is for a slightly increasing market for U.S. machinery and equipment exporters during the remainder of this year and a substantially increased market during 1971. Fields which hold particular promise are food processing and packaging machinery, materials handling and agricultural equipment, and scientific and technical instruments. U.S. suppliers of agricultural and agro-industrial equipment will have an excellent opportunity to improve their position in the Venezuelan market through a Department of Commerce-sponsored trade fair in Caracas next spring.

The investment climate in Venezuela continues good, although a proposed bill limiting foreign participation in banks could, if approved, have an adverse psychological effect.

The Government, however, has on repeated occasions stated that foreign investment is welcome in Venezuela provided it meets the following conditions: 1) that it bring its own capital; 2) that the investment be new rather than the takeover of an existing local company; 3) that the investment be complementary to existing industry; and 4) that the investment provide technology and development.

World Trade Actions

Exchange, License, Agent Rule Changes Reported

A dual exchange rate system, effective Oct. 5, has been instituted by the **Vietnamese** Government as part of a reform package to curb inflation and reduce pressure on the balance of payments. In addition to the official rate of 118 piasters per $1, a parallel market rate of 275 piasters per $1 has been established for all exports, non-essential imports, and sales of piasters to foreigners, including U.S. servicemen.

The official rate will continue to apply to all official transactions of the Vietnamese Government, and to sales of foreign exchange by foreign governments for their official expenditures in Vietnam.

A meeting to consider the establishment of a Consultative Group for the **Philippines** was held in Paris Oct. 1-2, under the chairmanship of the World Bank. Representatives of the following countries were present: Australia, Canada, France, Germany, India, Japan, the Netherlands, New Zealand, Spain, Switzerland, the United Kingdom and the United States. Also represented were the International Monetary Fund, the United Nations Development Program, the Asian Development Bank, and the Organization for Economic Cooperation and Development.

Tanzania's State Trading Corporation (STC), which maintains monopoly import rights over an expanding selection of imported commodities, recently acquired import rights over more than 120 additional items.

Reasons for the success of the STC are not difficult to ascertain. The Tanzanian Government has simply accorded the STC monopoly rights over the importation of selected commodities, and as the administrative capabilities of STC expand, more and more commodities are removed from the list of goods which may be imported by private interests and brought under STC control.

U.S. exporters who have exported under Open General License to private businessmen in Tanzania should determine whether their commodities are now being imported by the STC only. If this is the case, importation of the goods by a private businessman is allowed, only in special cases, and requires a specific import license.

U.S. businessmen wishing to determine whether their commodities are now under STC monopoly can submit the applicable BTN, SITC, or U.S. Schedule "B" numbers in a request to the Africa Division, BIC-884, U.S. Department of Commerce, Washington, D.C. 20230; telephone: 202 967-2436

The Government of **Ghana** has recently published a revised schedule of commodities subject to Open General License and Specific Licensing. The new schedule represents a considerable liberalization of import policy. More than 100 commodities, including transportation equipment, agricultural and industrial machinery, textiles and machine tools, formerly requiring Specific Licenses may now be imported under Open General License.

Copies of Ghanaian Government Notice No. 364, which provides a complete schedule of goods under Open General License, those requiring a Specific License, and those on the Restricted List are available from the Africa Division, BIC-884.

A new **El Salvador** law requires indemnification to a local sales agent or distributor when a foreign principal unilaterally terminates an agency contract without just cause. The new law became effective Aug. 10.

Under the law, agency or distributor contracts can be terminated by either party in writing with three months notice.

Although agents and their principals may disagree with the need for and the overall effects of the law, all agree that a likely result will be that foreign suppliers will investigate an agent's qualification more carefully before appointing him. Since in El Salvador there is no law requiring that a person obtain a permit or license to operate as an agent, such care has always been advisable.

Copies of Decree No. 61, in Spanish, are available from the American Republics Division, BIC-886.

Review Of Trade Actions

The next issue of* Commerce Today *will contain a month's review of official actions affecting U.S. trade, including a report on recent Senate action on the proposed Trade Act of 1970.

Export Warning: Invoice Request Is Not Firm Order

A number of U.S. companies have responded to requests for pro-forma invoices from foreign businessmen or firms by shipping the merchandise itself. This misunderstanding concerning the pro-forma invoice frequently results in payment difficulties.

A request for a pro-forma invoice does not constitute a firm order for goods and U.S. businessmen should not ship on the basis of such a request. The import licensing authorities of some countries, particularly in Africa and South America, require that the prospective importer submit a pro-forma invoice; i.e., an

invoice prepared by the seller, under his own letterhead, indicating the prices or approximated prices of the goods plus anticipated shipping charges, insurance, and all other expenses, before a license for such importation will be issued.

In the event the importer, having submitted the required pro-forma invoice, is denied an import license, or if the requested pro-forma invoice is not supplied by the seller, then any shipment made on the basis of such a request is likely to find the importer without a license to import the goods, or pay for them, even if he should wish to.

U.S. exporters are urged not to treat requests for pro-forma invoices as firm orders and not to ship goods without a firm order.

U.S. businessmen who are aware that import licenses are required for importation of their goods are advised to determine, prior to shipment, that the importer has obtained the required documents to both ensure entry of the goods and provide foreign exchange in payment.

U.S. Accedes To UN Arbitration Pact

The United States has acceded to the UN Convention on the Recognition and Enforcement of Foreign Arbitral Awards. Briefly, the Convention binds signers to recognize foreign awards resulting from written agreements to resolve disputes by arbitration.

With this Sept. 30 action, the U.S. becomes the 37th nation to become a party to this Convention, which was initiated by the International Chamber of Commerce and was developed and adopted by a UN Conference on June 10, 1958. It also marks the final step in a 12-year drive within the United States on the part of such organizations as the American Arbitration Association, the U.S. Council of the International Chamber of Commerce, and the American Bar Association to ensure U.S. entry.

Eximbank Financial Support Results In $244 Million Of U.S. Exports

Recent Eximbank credits totaling more than $109 million will help finance the purchase of $244 million worth of U.S. goods by overseas buyers.

The largest single credit, for $50 million, will be used by the Bank of America to make subloans to small and medium-sized borrowers in the Free World through its foreign branches, subsidiaries, affiliates, and correspondent banks for the purchase of U.S. equipment, machinery, spare parts and services. These subloans will be negotiated by Bank of America on a case-by-case basis and the bank will repay Eximbank's portion of each jointly financed transaction.

Proceeds of Eximbank's $50 million will finance 45% of the cost of each purchase from the United States while the bank will finance the other 45% after the buyer has made a cash payment of 10%.

Other loans include:

- A credit for more than $4 million to help **Algeria's** National Railway buy 29 diesel electric locomotives from General Motors Overseas Corp.;
- A $31.5 million credit and financial guarantees of $38.5 million in loans to help pay for $70 million in U.S. goods and services for a **Brazilian** iron ore producer which is 80% government-owned;
- Another **Brazilian** loan, for $11.89 million and financial guarantees of commercial loans, for a similar amount, will help Sao Paulo's subway system finance purchases of rolling stock, associated parts and services from U.S. firms;
- A $600,000 loan to help set up a newly-established bookprinting and publishing operation in Kingston, **Canada,** with $1.2 million worth of U.S. equipment. Major items to be purchased include a four-color printing press, page trimmer, typesetter, and a computer;
- A $500,000 relending credit to a private **Costa Rican** agricultural financial institution will pay 90% of the cost of purchases of U.S. goods and services by Costa Rican farmers;
- A $2 million credit to **Japan's** largest producer of diesel trucks and buses to help buy $4.7 million worth of U.S. machine tools and equipment;
- A $1.8 million credit will aid **Malaysia-Singapore** Airlines in purchasing a Boeing 737-200 jet valued at $5 million;
- A **Mexican** airline, Arrendadora Comermex, will buy a used DC-9-10 valued at $2.35 million with the assistance of an Eximbank credit for $899,000;
- **Peru** will buy cargo aircraft valued at $11.3 million for earthquake relief work with the help of a $4.3 million credit and a financial guarantee of a $4.8 million commercial loan;
- Similar credits and financial guarantees, for $1.39 million apiece, will help finance the purchase of $3.1 million in U.S. equipment by a **Venezuelan** paper manufacturer. The same sort of arrangement will supply 90% of the $1.04 million purchase price to install five television relay stations in the country.

Licensing Course Offered

The ins-and-outs of international licensing will be examined at a week-long American Management Association course starting Nov. 9 in AMA's New York headquarters.

The course will feature a special presentation on the anti-trust aspects of licensing, in light of recent actions taken by the Justice Department and the Federal Trade Commission.

Write: American Management Assn., AMA Bldg., 135 West 50th St., New York, N.Y. 10020

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine. The section that follows, incorporating the familiar Licensing and Investment Opportunities and World Trade Opportunities, presents details about licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies, appoint agents, major construction and expansion projects, and U.S. visits by foreign buyers.

Licensing, Investment Abroad

1499—GREECE—Owner seeks joint exploitation or sale of his rights in a **perlite mine.** Reportedly, the perlite is of high quality and available in large quantities. Christodoulos Chorafas, Ermou St., Mytilene, Lesvos Island, Greece. P-70851

1511 — MALAWI — Two joint ventures sought by local group to construct 100 units of **low-income housing** near capital. Group has seven years experience in commercial property ownership and experience in labor, domestic building and factory ownership. Construction materials available locally. Group will provide land, money and other services with U.S. partner providing remainder of equity. Mapanga Estate Ltd., P.O. Box 5833, Limbe, Malawi. WTD. P-70864

2800 — AUSTRIA — Joint venture with U.S. export firm representing American companies **wishing to enter East European market.** Also, license or similar agreement to produce **industrial chemicals and cleaning agents** for petrochemical and oil industries. Newly established firm has salesmen visiting East Europe. Alexander Hubacek, Eurochem GmbH, Paradisgasse 71, A-1190 Vienna. WTD. P-70855

2394 — GERMANY — Established tent manufacturer seeks license to produce **large tents including air structures** in West Germany. Present product line includes, tents, awnings, tarpaulins, beach and garden umbrellas, garden swings, raincoats and other water-proofed garments. The firm employs 1,700, maintains its own weaving, finishing and dyeing plants and has reported annual sales volume of over $11 million. L. Stromeyer & Co. GmbH, Stromeyersdorf, D-7750 Konstanz a. Bodensee, West Germany. Cable: Stromeyco Konstanz. WTD. P-70868

2899 — GERMANY — License to make **metal treating compounds for autos.** Presently distributes automotive waxes, cleaners and rust preventives. Established in 1932, employs about 30. Althaus & Vogt GmbH, 40 Brueckstrasse, 4630 Bochum, Germany. WTD. P-70859

3069 — GERMANY — Licenses to make products **allied to present line** of mechanical rubber goods and bare rubber thread are sought by large firm established in 1827. Hagen AG, Gottfried, 95/101 Rolshoverstr., 5 Koeln-Kalk 91, Germany. WTD. P-70866

3079—BELGIUM—Affiliate of diversified chemical group seeks licenses and sales arrangements for manufacture of **plastic products** in Common Market, particularly Benelux countries, Germany and northern France. Current processing includes calendaring of PVC films and sheets and extrusion of polyethylene tubular sheeting. Parent organization provides administrative back-up, land, building facilities and sales representation. Wishes to diversify beyond present activities in construction, packaging and agricultural fields. Sales manager planning November U.S. visit. Write: Office of International Investment, U.S. Dept. of Commerce, BIC-878, Washington, D.C. 20230. P-70870

3079—NETHERLANDS—Firm seeks licenses to manufacture **glass fiber reinforced polyester building materials including modular components, bathroom fixtures, ceiling and roofing systems and related items.** Firm recently bought small Rotterdam plant specializing in the manufacture of glass fiber reinforced polyester elements for the building industry. Company is subsidiary of large construction firm in Europe and is engaged in production of a variety of industry-related products with distribution affiliates in Sweden, Germany, France and the U.K. Its President will visit U.S. early in 1971. Th. J. de Gier, President, Matab-Smit N. V., 400 Ringdijk, P.O. Box 75, Slikkerveer, The Netherlands. WTD. P-70830

3356, 3691—GERMANY — Manufacturer of storage batteries and rolled and extruded lead products seeks licenses for **products complementary to its present line.** It employs about 650. Hagen AG, Gottfried, 95/101 Rolshoverstr., 5 Koeln-Kalk 91, Germany. WTD. P-70865

3391 — GERMANY — License to produce **cold formed steel parts** of 0.182 to 1.02 inches thickness and 0.394 to 4.156 inches long under a patented process. Utilizing a stepped process with or without axial boring. Firm also interested in joint venture with a U.S. company seeking to expand its European marketing activities. German concern is subsidiary of one of Europe's largest iron and steel companies. Office of International Investment, U.S. Dept. of Commerce, BIC-878, Washington, D.C. 20230. WTD. P-70858. Responses from U.S. firms will be sent to the German company for direct reply.

3537 — GERMANY — Firm seeks license from US. producers of **airport ground equipment.** It presently manufactures, distributes and exports parachutes, ground equipment, release assemblies, risers, pallets and tie-down equipment and seeks li-

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) manual.

Background information on opportunities abroad and also assistance on overseas investments are available from the Office of International Investment, U.S. Department of Commerce, BIC-878, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

For additional information on opportunities to manufacture foreign firms' products in the U.S., write Commerce's Office of International Investment, BIC-874, referring to the applicable file number assigned each opportunity.

WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230 or from any Commerce Field Office.

censes to expand its line. Established 1941; employs 200; annual sales of approximately $6.8 million. Brueggeman & Brand KG, 22-26 Bachstrasse, 5803 Volmarstein (Ruhr), Germany. WTD. P-70853

3545—ENGLAND—License to make **machine tool accessories.** Currently, produces precision lead screws and machine tool parts. Firm established 1919; employs about 100. Details available from King Associates, Eagle Rd., Newtown, Pa. 18941. P-70873

3559—GERMANY—Licenses to manufacture **chemical machinery, equipment.** Firm produces steam generating equipment; employs 1,000; is established in domestic and some export markets. Durrwerke AG, 2 Hombergerstrasse, 403 Ratingen, Germany. WTD. P-70860

3569—JAPAN—License or similar agreement to manufacture and market **automatic lubrication systems and equipment for machine tools.** Firm presently leading producer of automatic lubrication systems but wants to improve product. Also makes faucets, sprinklers and gas cocks. Employs about 300, has own sales force. Ample room and financial sources for expansion. Ren Kanery, Advisor, Showa Seisaku Co., Ltd., 2-16, 2-chome Azusawa, Itabashi-ku, Tokyo. WTD. P-70872

3800 — GERMANY — License to make **electric, electronic measuring and controlling equipment.** Also **electric-optical testing instruments** for pulp, paper and plastic industries. Established in 1932, firm employs about 180. Paul Lippke KG, Wilhelm-Leuschner-Str. 12, 5450 Neuwied, Germany. WTD. P-70867

3810, 3820—CANADA—Firm seeks joint venture or licensing agreement for the manufacture and sale of proven **industrial instruments.** U.S. participation could include machinery and equipment as well as processes covered by patents or trademarks on an equity (49%) or royalty basis. Firm manufactures industrial controls, training devices and custom engineered electronic systems. Presently sales representative for two U.S. firms. R. Copeland, Marketing Mgr., A.S.M. Manufacturing Co., 810 Wellington St., Ottawa 4, Ontario. WTD. P-70852

5080—AUSTRIA—Firm wishes to establish joint venture with an **export agent (CEM).** Company offers managerial and technical know-how and contacts in East Europe. In return seeks financing and U.S. contacts; U.S. firm to have majority participation. Firm currently imports industrial equipment and supplies in Austria, Czechoslovakia, Hungary and Yugoslavia. Gerhard Kindermann, Managing Partner, Intertechnp Import/Export Handelsges. mbh, Riemergasse 11, A-1010 Vienna. WTD. P-70862

5099—CYPRUS—Joint venture to establish **a fertilizer storage and packaging facility.** Fertilizer would be imported in bulk and packaged primarily for domestic market. Firm currently produces ventilated sulphur; distributes fertilizer, farm machinery and tires. Feasibility study on project is available from Cypriot company. Courtis Enterprises Co., 8 Lincoln St., P.O. 239, Famagusta, Cyprus. WTD. P-70874

6211—HONG KONG — Large brokerage firm seeks U.S. partners **for joint ventures in Far East.** Will consider any type of project; wants American companies willing to take substantial equity positions. Excellent connections throughout southeast Asia. Donald C. Soper, Business Development Mgr., Pearl Investment Managers, Ltd., 1709 Prince's Bldg., Hong Kong. WTD. P-70871

Licensing in U.S.

3312 — GERMANY — Licensing arrangements for manufacturing of **industrial fasteners** by the building industries. Examples include securing ropes, steel tubes, and concrete slabs at required distances. **File 1945**

3444 — GERMANY — Firm specializes in safety guide posts, markers, and highway materials, seeks licensees for **road safety equipment.** Also interested in cross-licensing agreement with a U.S. firm manufacturing products in the same field, but new to European markets. **File 1946**

3522—SWITZERLAND—Grass and crop cutter-bar type power mowers and cargotracs—Licensing rights are offered U.S. companies for manufacture of its agricultural machinery designed for hilly areas. **File 1816-R**

3531 — GERMANY — Company seeks American licensee for **floating grab dredgers** for the extraction of gravel from wet pits. Dredgers have a maximum capacity of 850 cu. yards/h gravel at a depth of 11 yards, and even operate economically at a depth of 55 yards. Outstanding feature is the hydraulically operated feed-chute which eliminates the normal practice of lifting the complete job and grab assembly. **File 1947**

3566—GERMANY — The manufacturer of drives, ball bearing cases, cold pressed parts, steel rings, etc., wishes to license its patented process for production of **cold pressed parts.** The process is used to produce parts of 3 to 30 mm (0.12 to 1.2 inches) thickness and 10 mm to 160 mm (0.394 to 6.3 inches) in length, in a stepped process with or without axial boring. **File 1948**

3579—SWITZERLAND — Manufacturer of business systems offers its addressing equipment including **plate embossing machinery, plate filing cabinets and automatic sorting and list maintenance systems** for manufacturing under license in the U.S. **File 1949**

3662—AUSTRIA—TV Transposition devices which are particularly useful as relay stations for transmitting TV signals into areas of difficult geographic structures. **File 1950**

3949—GERMANY—Sporting goods manufacturer seeks U.S. licensee for its tournament bows, arrows, darts and dart boards. Also seeks exchange of know-how or a joint venture. **File 1951**

Project list for fall UNIDO meeting in Nairobi available

The UN Industrial Organization (UNIDO) regional investment meeting is scheduled for Nairobi this fall. Firms interested in participating may wish to obtain the first project list containing 100 projects in 17 African countries which will be presented at the seminar.

The aim of the Nov. 13-Dec. 4 meeting is to provide an opportunity for interested foreign investors to discuss specific opportunities with delegates from African countries offering such opportunities. Proposals are welcome from U.S. companies.

A copy of the project list and details of the Nairobi meeting can be obtained from A. J. Aizenstat, Director, UNIDO office, UN Bldg., New York, N.Y. 10017. Earlier articles describing UNIDO regional meetings appeared in INTERNATIONAL COMMERCE, July 13 and July 27.

Mauritania Approves Second Development Plan; Emphasis On Agriculture, Conservation

A new Four Year Development Plan (1970-73) for Mauritania was approved July 14. Necessary revenues will come mainly from external sources. Emphasis of the new plan is directed toward agricultural development, particularly increased production of millet, rice, beans, corn and dates. Livestock, water and forest conservation also will receive attention.

In the mining and industrial sector, increased iron ore and copper production, petroleum exploration, and other minerals research will be encouraged. Expanded maritime industries, especially the greater production and processing of fish (mainly shrimp, lobster, and tuna) for export is a significant target for development under the new plan.

Priority infrastructure improvements for road, inland waterways, ports, airport construction and telecommunications extension projects are listed. Tourism, handicrafts industry, public health and education improvements are assigned special priorities.

Further details of the plan are available in French, from Africa Division, Commerce Department, Washington, D.C. 20230 or you may write direct, preferably in French, to Dr. Mamadou Toure, Minister of Plan and Rural Development, Nouakchott, Republic of Mauritania.

OFDI Publishes Bulletin To Assist Investors

The Office of Foreign Direct Investments (OFDI), Department of Commerce, has published OFDI's General Bulletin for 1970.

The OFDI General Bulletin is an official interpretive analysis and explanation of Foreign Direct Investment Regulations which investors may rely on in planning foreign investment programs.

The Bulletin interprets, explains, and amplifies by text and example, principal provisions of the OFDI Regulations. The sections of the Bulletin are arranged to correspond to sections of the Regulations for easy reference.

The Bulletin describes the new rules applicable to foreign borrowings by U.S. direct investors and circumstances under which these borrowings may be credited against foreign direct investments.

The 1970 edition of the General Bulletin appeared in the October 7, *Federal Register*. Reprints will be mailed to U.S. direct investors by the end of this month.

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the International Liaison and Trade Opportunities Staff and the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms are interested are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers used extensively by Government and industry.

U.S. firms should also be aware that the listing in *Commerce Today* of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.

Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.

WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-924, Washington, D.C. 20230 or from any Commerce Field Office.

Direct Sales

Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.

Miscellaneous agriculture

01920—FRENCH WEST INDIES—Cups for use in planting seeds, made of material that disintegrates after planting. Wishes to purchase average of 3,000 per mo. Marceau Yang-Ting (importer, distributor, retailer), Menaprix, Boite Postale 524-Fort-de-France. WTD in prep.

Meat products

20119—KOREA—Horse hide with good quality winter hair. Hair to be used in making cosmetic brushes. Initial order 2,000 skins. Choong Wai Fur Co. (imp., exporter, dresser), 1005 Jae Ki Dong, Dongdaemun-ku, Seoul. WTD in prep.

Dairy products

20231 — SINGAPORE — Powdered milk: spray processed skimmed milk powder; roller processed skimmed milk powder; spray processed full cream milk powder; roller processed full cream milk powder; spray processed buttermilk powder; roller processed buttermilk powder. Phillip Y. C. Wong, Asst. Gen. Mgr., Allied Chocolate Industries Ltd. (mfr.), 481 Tanglin Halt Rd., Singapore 3. WTD in prep.

Canning, preserving foods

20331—ETHIOPIA—Canned fruits: excluding pie mixes, baby foods. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P. O. Box 112, Addis Ababa. WTD 8/70.

20332—ETHIOPIA — Canned vegetables. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P. O. Box 112, Addis Ababa. WTD 8/70.

20333 — ETHIOPIA — Canned hominy, mushrooms. Prices c.i.f. Ethiopian ports. Modi's Grocery, (importer, retailer), P. O. Box 112, Addis Ababa. WTD 8/70.

20334—ETHIOPIA—Canned fruit juices, nectars, concentrates. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P. O. Box 112, Addis Ababa. WTD 8/70.

20338—ETHIOPIA—Jams, jellies, preserves. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P. O. Box 112, Addis Ababa. WTD 8/70.

20341 — ETHIOPIA — Dried, dehydrated fruits, vegetables. Prices c.i.f. Ethiopian ports. Modi's Grocery (imp., retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

20341—SINGAPORE—Raisins. Phillip Y. C. Wong, Asst. Gen. Mgr., Allied Chocolate Industries Ltd. (mfr.), 481 Tanglin Halt Rd., Singapore 3. WTD in prep.

20361 — ITALY — Frozen fish, other sea food; particularly interested in Boston common squid. Sicula Conserve di Onofrio Longo (importer, dist., agent), Via Principe Nicola 18, 95126 Catania. WTD 9/70.

Confectionery

20716 — ETHIOPIA — Salted nuts, other confectionery type products. Price c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

20716—SINGAPORE—Almond nuts. Phillip Y. C. Wong, Asst. Gen. Mgr., Allied Chocolate Ind., Ltd. (mfr.), 481 Tanglin Halt Rd., Singapore 3. WTD in prep.

20728 — ETHIOPIA — Chocolate, cocoa products. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

20730 — ETHIOPIA — Chewing gum. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

Beverage industries

● **20800 — CEYLON** — 300,000 imperial gal. of potable rectified spirits. Bid deadline Oct. 31. Chairman, Tender Board, Ministry of Finance, P.O. Box 500, Colombo 1 ★(202-967-4793).

Food preparations

20962—ETHIOPIA—Margarine, consumer sized tins. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

20991 — ETHIOPIA — Desserts. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

20992—ETHIOPIA—Chips, sticks, potato & corn. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

20993—ETHIOPIA — Sweetening sirups, molasses. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

20999—ETHIOPIA—Spices, peanut butter, packaged tea, unpopped popcorn, in consumer packages. Prices c.i.f. Ethiopian ports. Modi's Grocery (importer, retailer), P.O. Box 112, Addis Ababa. WTD 8/70.

Broad woven fabric mills, cotton

22113—GERMANY—Cotton print cloth. Prices c.i.f. European ports. Gortz & Co. (importer, distributor), 86 Im Schlenk, 41 Duisburg-Wanheimerort. WTD 9/70.

22115—GERMANY—Fine cotton fabrics. Prices c.i.f. European ports. Gortz & Co. (importer, distributor), 86 Im Schlenk, 41 Duisburg-Wanheimerort. WTD 9/70.

22111—GERMANY—Cotton gray goods, construction 23, 6/23, 6 per 0.39 inch 20/20 Ne; width 86 cm (33.86 inches); 96 cm (37.79 inches); 140 cm (55.12 inches); 150 cm (59.05 inches); 170 cm (66.93 inches). Prices c.i.f. European ports Gortz & Co. (importer, distributor), 86 Im Schlenk, 41 Duisburg, Wanheimerort. WTD 9/70.

22118—GERMANY—Cotton sheets, pillow cases. Prices c.i.f. European ports. Gortz & Co. (importer, distributor), 86 Im Schlenk, 41 Duisburg-Wanheimerort. WTD 9/70.

Fabricated textile products

23990—GERMANY — New developments in auto seat covers. Prices c.i.f. European ports. Direct purchase & agency. Althaus & Vogt GmbH (importer, dist., agent),

40 Brueckstrasse, 4630 Bochum. WTD 9/70.

23990 — GERMANY — Parachutes, all kinds; release assemblies; risers, tie-down equipment. Prices c.i.f. European ports. Direct purchase & agency. Brueggemann & Brand KG (importer, dist., mfr.), 22-26 Bachstrasse, 5803 Volmarstein (Ruhr). WTD 9/70.

Wood products

24992—GERMANY—Pallets: wood, metal. Prices c.i.f. European ports. Direct purchase & agency. Brueggemann & Brand KG (importer, dist., mfr.), 22-26 Bachstrasse, 5803 Volmarstein (Ruhr). WTD 9/70.

Paper mills

26217—NETHERLANDS—Kraft papers, linerboard, other packaging materials. Van Barneveld's Papier (importer, distributor), 37 Nijverheidslaan, P.O. Box 35, Veenendaal. WTD 9/70.

Converted paper products

26472—GERMANY — New developments in windshield wipers. Prices c.i.f. European ports. Direct purchase & agency. Althaus & Vogt GmbH (importer, dist., agent), 40 Brueckstrasse, 4630 Bochum. WTD 9/70.

26472—SOUTH AFRICA — Paper-based, disposable materials for manufacture of shrouds, mortuary sheets, bibs, incontinent sheets, etc. Direct purchase and agency. Vistachem (Pty.) Ltd. (importer, agent), 110 Durban Rd. Centre, Durban Rd., P.O. Box 156, Bellville, Cape Province. WTD 9/70.

Industrial chemicals

28183—GERMANY—Fatty acid esters. Fritz Rust & Co. (importer, distributor, agent), 2 Hamburg 1, Hermann Str. 16. WTD 9/70.

28183 — GERMANY — Rubber, plastics processing chemicals. POSSEHL Chemie- und Isolierstoffe GmbH, Attn.: Mr. Reysen (importer, distributor, mfr.), 2000 Hamburg 36, Colonnaden 72. WTD in prep.

28185—BRAZIL—Reagent grade organic chemicals, enzymes. Exclusive representation. S. Goldberg Ltda. (importer, distributor, agent, retailer), Rua Dona Antonia de Queiroz, 466, Caixa Postal 22036, Sao Paulo, SP. WTD 9/70.

28196—THAILAND—Aluminum hydroxide. Requests samples, c.i.f. Bangkok prices. Thai Asahi Glass Co., Ltd. Attn: Kiarti Srifuengfung, Man. Dir. (importer, mfr.), 33-35 Rajdamnern Ave., Mansion 7, P.O. Box 216, Bangkok. WTD in prep.

28197 — THAILAND — Sodium sulfate, anhydrous, salt cakes. Requests samples, c.i.f. Bangkok prices. Thai Asahi Glass Co., Ltd., Attn: Kiarti Srifuengfung, Man. Dir. (importer, mfr.), 33-35 Rajdamnern Ave., Mansion 7, P.O. Box 216, Bangkok. WTD in prep.

28199 — BRAZIL — Reagent grade inorganic chemicals. Exclusive representation. S. Goldberg Ltda. (importer, distributor, agent, retailer), Rua Dona Antonia de Queiroz, 466, Caixa Postal 22036, Sao Paulo, SP. WTD 9/70.

28199—GERMANY—Selenites (zinc and barium); strontium salts. POSSEHL Chemie und Isolierstoffe GmbH, Attn.: Walter Reysen (importer, distributor, mfr.), 2000 Hamburg 36, Colonnaden 72. WTD in prep.

28199—THAILAND—Arsenious acid. Requests samples, c.i.f. Bangkok prices. Thai Asahi Glass Co., Ltd., Attn: Kiarti Srifuengfung, Man. Dir. (importer, mfr.), 33-35 Rajdamnern Ave., Mansion 7, P.O. Box 216, Bangkok. WTD in prep.

Synthetic materials

28211—FRENCH WEST INDIES—Plastic sheeting to be used in manufacture of front and shelves for display cases, bookshelves, other furniture. Maharaj Freres & Cie (imp., dist., mfr.), Boite Postale 528, Fort-de-France, Martinique. WTD 9/70.

28215—GERMANY—Epoxy resin, melamine. POSSEHL Chemie und Isolierstoffe GmbH, Attn.: Walter Reysen (importer, distributor, mfr.), 2000 Hamburg 36, Colonnaden 72. WTD in prep.

28216—GERMANY—Raw materials for paints, varnishes. POSSEHL Chemie und Isolierstoffe GmbH, Attn.: Walter Reysen (importer, dist., mfr.), 2000 Hamburg 36, Colonnaden 72. WTD in prep.

28219 — GERMANY — Zirconium oxide. POSSEHL Chemie- und Isolierstoffe GmbH, Attn.: Walter Reysen (importer, distributor, mfr.), 2000 Hamburg 36, Colonnaden 72. WTD in prep.

28242 — MAURITIUS — Synthetic hair fibre modacrylic. Five tons monthly. Vogue Products Ltd., 18 Remy Ollier St., P.O. Box 148, Port Louis. WTD in prep.

Drugs

28332 — GERMANY — Vitamins, hydrochinon; dicalumphosphat. Fritz Rust & Co. (importer, distributor, agent), 2 Hamburg 1, Hermann Str. 16. WTD 9/70.

28349 — ETHIOPIA — Pharmaceutical preparations for veterinary use. Price quotations c.i.f. Djibouti, Ethio Pest Control Pvt. Ltd. Co. (mfr., retailer), P.O. Box 5020, Addis Abada. WTD 9/70.

Soap, detergents

28415—GERMANY—Detergents enzyme. Fritz Rust & Co. (importer, distributor, agent), 2 Hamburg 1, Hermann Str. 16. WTD 9/70.

Paints, varnishes, lacquers, enamels

28513—GERMANY — Raw materials for paints, varnishes manufacturing. POSSEHL Chemie und Isolierstoffe GmbH, Attn.: Walter Reysen (importer, distributor, mfr.), 2000 Hamburg 36, Colonnaden 72. WTD in prep.

Agricultural chemicals

28790—MAURITIUS—Herbicide of low water solubility, applied as a pre-emergence and capable of acting on weeds for a period of 3 months or more. Blyth Brothers & Co. Ltd.(importer, distributor, retailer), Reverend Lebrun, P.O. Box 56, Port Louis. WTD in prep.

Chemical products

28921—THAILAND—Coke powder for sheet glass manufacturing. Requests samples, c.i.f. Bangkok prices. Thai Asahi Glass Co., Ltd. Attn: Kiarti Srifuengfung, Man. Dir. (importer, mfr.), 33-35 Rajdamnern Ave., Mansion 7, P.O. Box 216, Bangkok. WTD in prep.

28993—GERMANY — Chemical preparations for autos. Prices c.i.f. European ports. Direct purchase & agency. Althaus & Vogt GmbH (importer, dist., agent), 40 Brueckstrasse, 4630 Bochum. WTD 9/70.

Tires, tubes

● **30100—BURMA**—17,070 motor vehicle tires and tubes for both highway and off the road service. Tender No. MEIC/12-T/1/70-71; bid deadline Oct. 29, at 4 p.m. Manager, Vehicle & Spares, Import Div., Myanma Export Import Corp., No. 577, Merchant St., Rangoon. Tenders available on loan from Chemicals Div., BDC, Dept. of Commerce, Wash., D.C. 20230 ★(202-967-3381). A review copy available at Dept. of Commerce Field Office, 11444 Federal Office Bldg., 450 Golden Gate Ave., San Fran. 94102 (415-556-5868).

Fabricated rubber products

30696 — SOUTH AFRICA — Surgical gloves. Direct purchase and agency. Vistachem Pty. Ltd. (importer, agent), 110 Durban Rd. Centre, Durban Rd., P.O. Box 156, Bellville, Cape Province. WTD 9/70.

Plastic products

30797 — GERMANY — Plastic household, kitchen utensils. HAUSRAT-Import GmbH (importer, agent), 10 Ohmstrasse, D-7100 Heilbronn. WTD 9/70.

Glass products

32315—GERMANY — New developments in auto mirrors. Prices c.i.f. European ports. Direct purchase & agency. Althaus & Vogt GmbH (imp., dist., agent), 40 Brueckstrasse, 4630 Bochum. WTD 9/70.

Abrasive, asbestos, nonmetallic mineral products

32950—AUSTRIA—Material substituting (electrically fused) magnesia, for use in production of electric heating equipment, heat resistance up to 900 degrees centigrade. A. Grohmann (importer, agent), Franzensgasse 23, P.O. Box 33, A-1052 Vienna. WTD in prep.

32962—AUSTRIA—Glass wool. A. Grohmann (imp., agent), Franzensgasse 23, P.O. Box 33, A-1052 Vienna. WTD in prep.

Steel mill products

● **33100—BURMA**—Supply of galv. steel wire and accessories of various specs. Tender No. 14(t)/CONST-ESB(E)/69-70; bid deadline Nov. 16. Myanma Export Import Corp., Rangoon. Copies of tender documents may be purchased from Office of the Controller of Stores, Electricity Supply Board, Rose Bank Rd., Ahlone, Rangoon.

● **33100—COSTA RICA**—7,171 units of structural steel beams, pieces and sheeting, type ASTM. Tender No. 1895; bid deadline Nov. 12. Instituto Costarricense de Electricidad, San Jose. Copies of specifications available in Spanish from Iron & Steel Div., BDC-669, U.S. Dept. of Commerce, Washington, D.C. 20230 ★(202-967-4412).

● **33100—INDIA**—134.85 m.t. scheelite concentrate of various specs. Tender No. P/107/49/722/19.2.70/PL; bid deadline Nov. 17. Directorate General, Supplies & Disposals, New Delhi. Copies of tender documents may be purchased from India Supply Mission, 2536 Massachusetts Ave., NW., Washington, D.C. 20008.

● 120 m.t. wolframite of various specs. Tender No. P/107/49/721/19.2.70; bid deadline Nov. 17. Directorate General, Supplies & Disposals, New Delhi. Copies of tender documents may be purchased from India Supply Mission, 2536 Mass. Ave., NW., Washington, D.C. 20008.

● 33100—IRAN—13 items round steel of various spec. Tender No. 1125/49; bid deadline Nov. 22. Iranian State Railways, Tehran. Copies of tender documents available from Iranian Economic Mission, 2233 Wisconsin Ave., NW., Washington, D.C. 20007.

● 33100—PAKISTAN—25,000 ft. spare pipe line with specials and fittings. Tender No. GLP//W-55; bid deadline Nov. 10. Greater Lahore Water Supply, Lahore. Copies of tender documents may be purchased from Director Procurement & Stores, Lahore Water Supply, Sewerage Drainage Project, Lahore Improvement Trust, 4-A Gulberg V, Lahore.

● Supply steel line pipe of various specs. for natural gas. Tender No. SN 1712/70; bid deadline, Nov. 9. Sui Northern Gas Pipelines Ltd., Lahore. Copies of tender documents available from Iron & Steel Div., BDC-669, U.S. Dept. of Commerce, Washington, D.C. 20230. ★ (202-967-4412).

Primary smelting, refining of nonferrous metals

● 33300 — INDIA — Supply of electrolytic copper wire bars. Bid deadline Nov. 7; Tender No. RE(S)/8 of 1970. Contact Ministry of Railways, Railway Board, Raisina Rd., New Delhi. Tender documents available from India Supply Mission, Washington, D.C. 20008.

Nonferrous foundries

33600 — GERMANY — Household and kitchen equipment and utensils of metal. HAUSRAT-Import GmbH (importer, agent), 10 Ohmstrasse, D-7100 Heilbronn. WTD 9/70.

Cutlery, hand tools, general hardware

34231—JAPAN—Hand tool or special tool for use in connecting ends of flexible metallic hoses with brass fittings without welding or brazing (inside diameter of hoses ⅜, ½, ¾ in.; working water pressure 2-3 kg/cm²), monthly requirements estimated at 1,000-1,500 each. The Bunka Boeki Co., Ltd. (importer, distributor, agent), Marunouchi-Yaesu Bldg., 6 Marunouchi, 2-chome, Chiyoda-ku, Tokyo. WTD 6/70.

34292—GERMANY—Furniture, builders' hardware. Franz Hettich KG (mfr.), P.O. Box 1240, D-7297 Alpirsbach, Baden-Wuerttemberg. WTD 9/70.

Fabricated wire products

34816 — JAMAICA — One remote controlled gate, to be located within a 45 ft. space; requires clearance of 30 ft. Electrical specs: 415 v. 3 phase, 50 cycles or 240 v., single phase, 50 cycles. Brand & Howell (engineering firm), Box 16, Kingston 10. WTD 1/70.

Farm machinery

35223—ETHIOPIA — Fertilizing machinery. Price quotations c.i.f. Djibouti. Ethio Pest Control Pvt. Ltd. Co. (mfr., retailer), P.O. Box 5020, Addis Ababa. WTD 9/70.

35228—ETHIOPIA — Agricultural hand tools, sprayers. Price quotations c.i.f. Djibouti. Ethio Pest Control Pvt. Ltd. Co. (mfr., retailer), P.O. Box 5020, Addis Ababa. WTD 9/70.

35228—SINGAPORE—Wet process rice mill. Pang Ee Ang, Man. Dir., Industrial Automation (Pte) Ltd. (importer, distributor), 469 Block 62, Taman Jurong, Singapore 22. WTD in prep.

Construction, mining equipment

● 35300 — IRAN — Eight portable rock crushers, diesel engine of approx. 100 hp, 30 tons per hour capacity. Tender No. 67&68-49; bid deadline Nov. 28. Purchasing Dept., Iranian State Railways, Tehran. Copies of tender available at Iranian Economic Mission, 2233 Wisconsin Ave., NW., Washington, D.C. 20007. Copy of tender is available on a short-term loan from the General Industrial Equipment Div., BDC-647, U.S. Dept. of Commerce, Washington, D.C. 20230 ★(202-967-5585).

35314 — GERMANY — Electrohydraulic brake lifters; double brake shoes for cranes. Prices c.i.f. European ports. GENSEL—Kranbetriebe KG (dist., mfr., exporter), 862 Schildescher Strasse, 4811 Heepen bei Bielefeld. WTD 8/70.

Metalworking machinery

35410—KOREA — Ball bearing grinding machine, 8 other associated machines. Specs. available from Trade Opportunities Staff, BDC-541, Rm. 5877, U.S. Dept. of Commerce, Washington, D.C. Bid deadline Oct. 26. Korea Bearing Industrial Co., Ltd. (importer, exporter), 23, 2-ka, Taepyong-ro, Chung-ku, Seoul. WTD 1/69.

Special industry machinery

35520—KOREA—Pump, plunger, for liquid; textile machines, 16 other commodity items. Specifications available from Trade Opportunities Staff, BDC-541, Rm. 5877, U.S. Dept. of Commerce, Washington, D.C. 20230. Bid deadline Oct. 22. Tong Yang Nylon Co., Ltd. (importer, mfr., exporter), 65-1 Sokong-dong, Chung-ku, Seoul. WTD in prep.

35591—ETHIOPIA — Chemical manufacturing industries machinery, equipment to manufacture fertilizers, insecticides, weedkillers. Price quotations c.i.f. Djibouti. Ethio Pest Control Pvt. Ltd. Co. (mfr., retailer), P.O. Box 5020, Addis Ababa. WTD 9/70.

35595 — KOREA — Blow moulding machine, plastic bottle manufacturing; fireproof brick, glass jar manufacturing; four other commodity items. Specifications available from Trade Opportunities Staff, BDC-541, Rm. 5877, U.S. Dept. of Commerce, Washington, D.C. 20230. Bid deadline Oct. 24. Pacific Chemical Industrial Co., Ltd. (importer, mfr.), 159-5 2-ka, Hangang-ro, Yongsan-ku, Seoul. WTD in prep.

General industrial machinery

● 35600 — INDIA — Electric carbon resistance furnace with 120 mm. diameter heating pipe for testing refractories at temperatures up to 1700°C. Tender No. PUR-1-94059/3002; bid deadline Nov. 26. Deputy Controller of Purchase, Bokaro Steel Ltd., Purchase Div., P.O.B.S. City, District D Hanbad, Bihar. BSL interested in obtaining price quotations together with drawings of furnace offered.

● 35600—PAKISTAN—Four deep well turbine pumps with motor, capacity is 4 Cfs. Tender No. GLP/W-58; bid deadline Nov. 11. Specs. available for $5.20, plus postage, from the Director, Procurement & Stores, Greater Lahore Water Supply, Sewerage & Drainage Project, Lahore Improvement Trust, 4-A Gulberg V, Lahore.

● Varying sizes, quantities of regulator/control valves for gas service. Tender No. SN-1736/70; bid deadline Oct. 16. Man. Dir., Sui Northern Gas Pipelines Ltd., Monnoo House, 3 Montgomery Rd., P.O. Box No. 56, Lahore. Specifications available on short term loan from the General Industrial Equip. Div., BDC-647, U.S. Dept. of Commerce, Washington, D.C. 20230. (202-967-5585).

● Varying sizes, quantities of gas filter separators, horizontal type, designed to remove 98% of solid particles and liquid droplets one micron and larger. Tender No. SN-1737/70; bid deadline Oct. 19. Man. Dir., Sui Northern Gas Pipelines, Ltd., Monnoo House, 3 Montgomery Rd., P.O. Box No. 56, Lahore. Specifications available from General Industrial Equip. Div., BDC-647, U.S. Dept of Commerce, Washington, D.C. 20230 (202-967-5585).

● Sewage pumps with electric motors, with following capacities: 10 Cs, 15 Cs and 20 Cs, two each; four portable dewatering sets with diesel engines, two Cfs capacity; and four portable submersible pumping sets with diesel engines, ½ Cfs. capacity. Tender No. GLP/S-19; bid deadline Nov. 10. Specifications available for $5.20, plus postage from Director Procurement & Stores, Greater Lahore Water Supply, Sewage & Drainage Project, Lahore Improvement Trust, 4-A Gulberg V, Lahore.

● 35600 — PARAGUAY — Supply of pipes, accessories, ductible iron, Tender No. 08-70; butterfly valves, Tender No. 09-70. Bid deadlines are Nov. 4 and Nov. 5 respectively. Specifications available for G 1,000 each (approx. US$8), reimbursable, from Secretaria General Corporacion de Obras Sanitarias, Avenida Espana 498, Asuncion.

Offices, computing machines

● 35700—NATO—Supply four types of auxiliary equipment for HP 2116B computer: time-shared basic system, with software, supporting up to 16 terminals, Ref. No. AC/11786; teletype interface with photoreader and puncher, Ref. No. AC/11787; line printers, Ref. No. AC/11788; four 24 or 32 K words memory with input/output expander, Ref. No. AC/11789. Although interrelated each is a separate tender and bids may be submitted for any or all items. Bid deadline Nov. 16. Invited by NATO, Saclant ASW Research Centre, Purchasing & Contracting Section, Viale San Bartolomeo 400, 19026 La Spezia, Italy. Only U.S. firms certified by the Dept. of Commerce are eligible to bid on NATO projects. Firms interested in certification should contact the International Liaison & Trade Opportunity Staff, BDC-541, U.S. Dept. of Commerce, Washington, D.C. 20230. Terms and specifications available on loan from Scientific & Business Equip. Div., BDC-653, U.S. Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-2939). A review copy will be available at the Dept. of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Fran., Calif. 94102 (415-556-5868).

35731—FINLAND — Minicomputers, attachments to incorporate in electronic industrial control systems, other electronic equipment; also interested in license. Elektroniikkayhtyma Oy, Rolf

Lilja, Man. Dir. (mfr.), Heikkilontie 2, Helsinki 20. WTD 10/70.

Service industry machines

35854—ISRAEL—Compressors for air-conditioning units, plants: capacity 10 1,000 tons. Direct purchase & exclusive agency. ISRAVIR Ltd. (importer, dist., airconditioning, heating, cooling, ventilating contractors), 23 Mikwe Israel St., Tel Aviv. WTD in prep.

Machinery

35992—GERMANY—Hydraulic cylinders. Prices c.i.f. European ports. GENSEL-Kranbetriebe KG (dist., mfr., exporter), 862 Schildescher Strasse, 4811 Heepen bei Bielefeld. WTD 8/70.

Electric transmission, distribution equipment

• 36100 — NATO — Italian Fonoff announces NATO project No. 128/M for construction of electrical transformer substation, stand by, power plant with electric and electro-mechanical equipment related. Approximate cost of installation U.S. $40,000. Only U.S. firms certified by Commerce are eligible to bid on NATO projects. U.S. firms interested in certification should contact the International Liaison & Trade Opportunities Staff, BDC-541, U.S. Dept. of Commerce, Washington, D.C. 20230. Specifications available from Ministero Difesa Direzione General Dei Lavori, Del Demainio E Dei Material Del Genio-3A Divisione-Prazzale Della Marina, 00100 Rome, Italy, until Oct. 31.

36110—GERMANY — Electronic measuring, control equipment. Prices c.i.f. European ports. Electrofact GmbH (dist., agent), 2 Siemensstrasse, 4041 Stuerzelberg. WTD 9/70.

Household appliances

36312—AUSTRALIA—Gas cookers for use in trailers/mobile homes. Mr. C. Sutters, G.E.C. Australia Pty. Ltd. (importer, dist., mfr.), 113 Margaret St., Brisbane, Queensland 4000. WTD in prep.

36312 — GERMANY — Barbecue, garden, camping grills. HAUSRAT-Import GmbH (importer, agent), 10 Ohmstrasse, D-7100 Heilbronn. WTD 9/70.

36321—FRENCH WEST INDIES — Refrigerators powered by gas (butane). Marceau Yang-Ting (importer, distributor, retailer), Menaprix, Boite Postale 524, Fort-de-France. WTD in prep.

36344—AUSTRIA — Electric household appliances, new development, new designs: 220 v AC. Direct purchase & agency. Ing. Josef Loerner O.H.G. (imp., agent, exporter), Webgasse 7, P.O. Box 239, A-1061 Vienna. WTD in prep.

Electric lighting, wiring equipment

• 36400—PAKISTAN — 15,600 service connectors, dia. ¼" to 1". Tender No. GLP/W-57, bid deadline Nov. 10. Specifications available for $5.20, plus postage, from the Director, Procurement & Stores, Greater Lahore Water Supply, Sewerage & Drainage Project, Lahore Improvement Trust, 4-A Gulberg V, Lahore.

36421—AUSTRIA—Electric lighting fixtures, residential. Direct purchase & agency. Ing. Josef Loerner O.H.G. (imp., agent, exporter), Webgasse 7, P.O. Box 239, A-1061 Vienna WTD in prep.

Radio, television receiving sets

36511—GERMANY—New developments in auto radios. Prices c.i.f. European ports. Direct purchase & agency. Althaus & Vogt GmbH (imp., dist., agent), 40 Brueckstrasse, 4630 Bochum. WTD 9/70.

36514—NETHERLANDS — Two hundred twenty V., 50 cycle tape recorders, hi-fi, stereo equipment. Exclusive distributorship. Koelrad N.V., Attn: G. J. D. Hendriksen (importer, distributor), 19 Maalderij, Amstelveen. WTD 9/70.

Communication equipment

36612 — FRANCE — Relay coil winding machinery. Compagnie Industrielle de Telecommunications (C.I.T.) (mfr.), 12 rue della Baume, 75-Paris 8. WTD 8/70.

36624—GERMANY — Airport ground equipment. Prices c.i.f. European ports. Direct purchase & agency. Brueggemann & Brand KG (importer, dist., mfr.), 22-26 Bachstrasse, 5803 Volmarstein (Rhur). WTD 9/70.

36629—JAMAICA—Aeronautical mobile radio equipment, ground to ground use; 118 mhz to 132 mhz; 10 or 15 watts AM or FM; Ruel Samuels Ltd. (importer, dist., agent), 2 Lismore Ave., Kingston 5. WTD in prep.

Electronic components, acessories

36790—AUSTRALIA—Electronic components. Elchem (importer, distributor, mfr., agent), P.O. Box 232, Clayton, Victoria 3168. WTD 2/70.

Motor vehicles, equipment

37141—COLOMBIA—Spare parts for autos, Mopar Chrysler parts or equal. Compania Autoparts Ltda. (importer, agent, retailer). Carrera 15 No. 22-48-Apartado Aereo 397, Bucaramanga. WTD 9/70.

37141—GERMANY—Auto parts; especially steering stabilizers (idler arms); tie rod ends; ball joints. Direct purchase & agency. Correspondence requested in German. Wolfgang Goehrum KG (importer, agent), 19 Ulmenstrasse, P.O. Box 60, D-7034 Maichingen, Baden-Wuerttemberg. WTD 9/70.

Engineering, laboratory, scientific, research instruments

38112 — AUSTRALIA — Testing equipment for electronic industry. Elchem (importer, distributor, mfr., agent), P.O. Box 232, Clayton, Victoria 3168. WTD 2/70.

38112—BRAZIL — Laboratory, scientific instruments. Exclusive representation. S. Goldberg Ltda. (importer, distributor, agent, retailer), Rua Dona Antonia de Queiroz, 466, Caixa Postal 22036, São Paulo, SP. WTD 9/70.

38112 — JAPAN — Precision gas tester, portable or stationary, for NOX and HC, suitable for direct sampling of engine exhaust (measuring range 1/100 PPM). The Bunka Boeki Co., Ltd. (importer, distributor, agent), Marunouchi-Yaesu Bldg., 6 Marunouchi, 2-chome, Chiyoda-ku, Tokyo. WTD 6/70.

Surgical, medical instruments

38410—GERMANY — Veterinary instruments, in particular articles for artificial insemination of cattle. Walter Eickemeyer (distributor, mfr.), 2 Schuetzenstrasse, D-7200 Tuttlingen. WTD 9/70.

38410—SOUTH AFRICA—Surgical, orthopedic instruments; diagnostic apparatus; disposable hypodermic syringes, needles; other surgical, medical instruments. Direct purchase and agency. Vistachem Pty. Ltd. (importer, agent), 110 Durban Rd. Centre, Durban Rd., P.O. Box 156, Bellville, Cape Province. WTD 9/70.

Toys, amusement, sporting goods

39493 — GERMANY — Camping equipment. Walter Eickemeyer (dist., mfr.), 1 Schuetzenstrasse, D-7200 Tuttlingen. WTD 9/70.

Manufacturing industries

39991—SINGAPORE—Firefighting, safety equipment. Thomas Siow, Gen. Mgr., Indimex (Private) Ltd. (importer, distributor), 35-A Havelock Rd., Singapore 1, GPO Box 2041. WTD in prep.

39999—FRENCH WEST INDIES—Hand window wipers used in washing store windows (large size). Marceau YangTing (importer), Menaprix, Boite Postale 524, Fort-de-France. WTD in prep.

Agencies

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.

Meat products

20115—KOREA—Lard for cooking, industrial purposes. Keeyang Corp. (agent), 3rd Fl., 33, 2-ka, Taepyong-ro, Chung-ku, Seoul. (I.P.O. Box 1975). WTD in prep.

Grain mill products

20460 — SOUTH AFRICA — Dextrose: oral, injectionable grades. Exclusive agency for Southern Africa. Netherlands African Trading Co. Pty. Ltd. (importer, agent), 614/616 Groote Kerk Bldg., 39 Adderley St., P.O. Box 2732, Cape Town, Cape Province. WTD 9/70.

Food preparations

20941 — KOREA — Inedible tallow. Keeyang Corp. (agent), 3rd Fl., 33, 2-ka, Taepyong-ro, Chung-ku, Seoul. (I.P.O. Box 1975). WTD in prep.

Yarn, thread mills, products

22842—FINLAND—Raw bleached cotton thread Nos. 1/40, 1/36. Introductory c.i.f. quotations, terms desired. EFFICO, Astrid Hytonen (agent), Viherlaakso. WTD 9/70.

Pulp mills

26112 — KOREA — Chemical wood pulp. Keeyang Corp. (agent), 3rd Fl., 33, 2-ka, Taepyong-ro, Chung-ku, Seoul. (I.P.O. Box 1975). WTD in prep.

Books

27311 — IRELAND — Textbooks. Modern

Teaching Ltd. (importer, dist., agent), 23 Westland Row, Dublin 2. WTD 8/70.

Synthetic materials

28242—KOREA—Polynosic fibers, polyurethane yarns. Yushin & Co. (agent), 3rd Fl., Samwoo Bldg. (Kukwan), 46, 2-ka, Taepyong-ro, Chung-ku, Seoul. (I.P.O. Box 1900). WTD in prep.

Drugs

28311—FRANCE—Fine biochemicals for research, clinical use. S.E.D.E.C.O. (importer, dist., agent), 5 rue Drouot, 75-Paris 9. WTD 6/70.

28340—HONG KONG—Pharmaceuticals. Hunter Corp., Ltd. (importer, distributor, agent), 102 Takshing House, P.O. Box 1821, Cable Address: SHIPHUNTER, Hong Kong. WTD in prep.

28340—IRELAND—Pharmaceutical preparations for human, veterinary use. Rice, Steele & Co. Ltd. (importer, dist., mfr.), 4-7 Brabazon St., Dublin 8. WTD 8/70.

28340—IRELAND—Pharmaceutical preparations for human, veterinary use. Interchem. Ltd. (imp., dist., agent), St. Stephen's Green House, Dublin 2. WTD 8/70.

Soap, detergents, cleaning preparations, perfumes, cosmetics

28441 — AUSTRIA — Shaving preparations, including aerosol products. Correspondence requested in German. Georg Sailer, Handel mit graphischen Maschinen (importer, dist., retailer), P.O. Box 59, A-1211 Vienna. WTD 4/70.

28442—AUSTRIA—Perfumes, toilet water, colognes: liquid, solid. Correspondence requested in German. Georg Sailer, Handel mit graphischen Maschinen (importer, dist., retailer), P.O. Box 59, A-1211 Vienna. WTD 4/70.

28443—AUSTRIA—Hair grooming products for ladies, men. Correspondence requested in German. George Sailer, Handel mit graphischen Maschinen (importer, dist., retailer), P.O. Box 59, A-1211 Vienna. WTD 4/70.

28444—AUSTRIA—Oral hygiene products. Correspondence requested in German. George Sailer, Handel mit graphischen Maschinen (imp., dist., retailer), P.O. Box 59, A-1211 Vienna. WTD 4/70.

28445—AUSTRIA—Cosmetic, toilet preparations for ladies, men. Correspondence requested in German. Georg Sailer, Handel mit graphischen Maschinen (importer, dist., retailer), P.O. Box 59, A-1211 Vienna. WTD 4/70.

Agricultural chemicals

28790—IRELAND — Agricultural, horticultural chemicals. Interchem Ltd. (importer, distributor, agent), St. Stephen's Green House, Dublin 2. WTD 8/70.

28790—MALAWI — Chlorinate water-treating compound for swimming pools. Quotes in 1-ton lots c.i.f. Beira. Paul Gatrell Agencies Ltd. (importer, agent), Johnston Rd., P.O. Box 562, Blantyre. WTD in prep.

Fabricated rubber products

30692—AUSTRIA — High-pressure hose of all types. Exclusive agency. Intertechno Import/Export Handelsges mbH, (importer, agent, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

Plastic products

30798—SWITZERLAND — Plastic cards for identification systems in banks, business, industry. Sadrag (distributor, mfr.), Attn: Alfred Jacob, Man. Dir., 4633-Laufelfingen. WTD in prep.

Abrasive, asbestos, nonmetallic mineral products

32922—AUSTRIA—Brake linings for use by automotive repair, maintenance enterprises. Exclusive agency. Intertechno, Import/Export Handelsges mbH (importer, agent, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

Nonferrous foundries

33610 — ENGLAND — Decorated aluminum cookware. Salter Housewares Ltd. importer, mfr., agent), Llanelli, Carmarthenshire, S. Wales. WTD 8/70.

Cutlery, hand tools, general hardware

34231 — AUSTRIA — Mechanics' hand service tools for automotive maintenance, repair work; mechanical automobile jacks. Exclusive agency. Intertechno, Import/Export Handelsges mbH, (importer, agent, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

34231 — SWITZERLAND — Mechanics' hand service tools, toolroom articles. Im-Hof & Co. (importer, dist.), Schuetzenmattstrasse 27, 4000-Basel 3. WTD in prep.

Heating apparatus, plumbing fixtures

34336—IRELAND—Domestic, industrial incinerators. Harwood Industrial Services Ltd. (importer, retailer), 51 Waterloo Lane, Waterloo Rd., Dublin 4. WTD 8/70.

Screw machine products

34521 — AUSTRIA — Blind rivets, other standard industrial fasteners of stainless steel, copper/tin alloys. Exclusive agency. Intertechno, Import/Export Handelsges mbH, (importer, agent, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

34522 — FINLAND — Special industrial fasteners, including expansion bolts, screw anchors. Latest, sophisticated types desired. Oy Bermic Ab (Evert Michelsson, Man. Dir.) (importer, dist., agent), Vuorimiehenkatu 3, Helsinki 14. WTD 9/70.

Fabricated metal products

34943—SWEDEN—Needle valves, stainless steel and acid-resistant to be used in several industries, such as chemical, petrochemical, paper and pulp, etc. Fliesberg Aktiebolag, Ingenjorsfirman (importer, mfr., exporter), 3 Nybrogatan, S-103 81 Stockholm. WTD 9/70.

34946—FINLAND—Quick connectors for pneumatic hose. Oy Bermic Ab (Evert Michelsson, man. dir.) (importer, dist.), Vuorimiehenkatu 3, Helsinki 14. WTD 9/70.

Engines, turbines

35191 — THAILAND — Gasoline engines, air-cooled, 4 cycle. Requests catalogs, c.i.f. Bangkok prices. Eastern Agency Ltd. Partnership (importer, agent), Rm. 301, 23 Rajawong Rd., P.O. Box 1084, Bangkok. WTD in prep.

35192—THAILAND—Diesel engines, air-cooled, 2 and 4 cycle. Requests catalogs, c.i.f. Bangkok prices. Eastern Agency Ltd. Partnership (importer, agent), Rm. 301, 23 Rajawong Rd., P.O Box 1084, Bangkok. WTD in prep.

Construction, mining, materials handling machinery, equipment

35319—FINLAND—Construction machinery, equipment, including water well and blast hole drills, handheld compaction equipment, drawn ditchers, and trenchers, contractors' handheld tools, graders. Latest, sophisticated equipment desired. Oy Bermic Ab (Evert Michelsson, Man. Dir.) (importer, dist., agent), Vuorimiehenkatu 3, Helsinki 14. WTD 9/70.

35351 — SWITZERLAND — All kinds of conveyors for industry, trade. Im-Hof & Co. (importer, dist.), Schuetzenmattstrasse 27, 4000-Basel. WTD in prep.

Metalworking machinery

35410—KOREA—Lathes, grinding machines, other machine tools. Keeyang Corp. (agent), 3rd Fl., 33, 2-ka, Taepyong-ro, Chung-ku, Seoul. (I.P.O. Box 1975). WTD in prep.

35415—NEW ZEALAND—Lathes, other metalworking machinery, equipment. Exclusive agency. P. J. Edwards Ltd., Mgr.: E. E. Cosier (importer, agent), 156 Vincent St., Auckland 1, P.O. Box 261, Auckland 1. WTD 9/70.

35416—NEW ZEALAND—Milling machines, other metalworking machinery, equipment. Exclusive agency. P. J. Edwards Ltd. Mgr.: E. E. Cosier (importer, agent), 156 Vincent St., Auckland 1, P.O. Box 261, Auckland 1. WTD 9/70.

35450—SWITZERLAND — Machine tool accessories, all kinds, incl. toolroom machinery. Im-Hof & Co. (importer, dist.), Schuetzenmattstrasse 27, 4000-Basel. WTD in prep.

35482—AUSTRIA—Blind rivet installation tools; tools for installation of other industrial fasteners. Exclusive agency. Intertechno, Import/Export Handelsges mbH (importer, agent, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

35482—FINLAND—Pneumatic hammers, other hand tools. Latest, sophisticated equipment desired. Oy Bermic Ab (Evert Michelsson, Man. Dir.) (importer, dist., agent), Vuorimiehenkatu 3, Helsinki 14. WTD 9/70.

35482 — SWITZERLAND — Metalworking machinery, all kinds, incl. power-driven handtools, attachments, toolroom machinery. Im-Hof & Co. (importer, dist.), Schuetzenmattstrasse 27, 4000-Basel 3. WTD in prep.

Special industry machinery

35521 — BRAZIL — Complete spinning machinery, equipment for cotton, wool, synthetic blends. Interested in representing manufacturers only. CONEMAR-Maquinas Texteis Ltda. (agent), Rua Amaral Gurgel 244, 3° andar, Caixa Postal 9518, Sao Paulo, SP. WTD 8/70.

35521—GERMANY — Textile machinery, in particular finishing machinery, spinning machinery and hosiery, other knitting machines. Prices c.i.f. European ports. K. Mueller-Hoberg, Maschinenagentur (agent, exporter), 32 Rheydter Strasse, 405 Moenchengladbach. WTD 8/70.

35522—GERMANY — Parts, attachments for textile machinery, in particular for finishing, spinning and hosiery, other knitting machines. Prices c.i.f. European ports. K. Mueller-Hoberg, Maschinengentur, (agent, exporter), 32 Rheydter Strasse, 405 Moenchengladbach. WTD 8/70.

Metalworking machinery

35480—GERMANY—Medium and heavy duty metal working machinery, formers, cutters, grinders. Prices c.i.f. European ports. Joe Hauf, Industrie-Vertretungen (agent), 18 Wilhelm-Raabe-Strasse, 4 Duesseldorf. WTD 1/70.

Special industry machinery

35510—IRELAND—Manufacturing, packaging machinery for food, beverage trades. Horace B. Hammond & Son Ltd. (importer, distributor, agent), 29 Eaton Sq., Monkstown, Co. Dublin. WTD 8/70.

General industrial machinery

35613—THAILAND—Pumps, centrifugal, piston, and domestic water systems. Requests catalogs, c.i.f. Bangkok prices. Eastern Agency Ltd. Partnership (importer, agent), Rm. 301, 23 Rajawong Rd., P.O. Box 1084, Bangkok. WTD in prep.

35615—ITALY—Compressor which, used as an electric drill attachment, can spray any liquid and/or an electric drill powered pump and/or any other electric drill accessory. Willchip International (dist.), Via Arrivabene 11/F, Milano. WTD 5/69.

35690—AUSTRIA—Automotive lubricating devices; hydraulic jacks for use by repair, maintenance work shops. Exclusive agency. Intertechno, Import/Export Handelsges mbH, (importer, agent, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

35690 — KOREA — Small capacity scrap plastics regenerating machines with built-in discoloring mechanism. Requests technical brochures. Keeyang Corp. (agent), 3rd Fl., 33, 2-ka, Taepyong-ro, Chung-ku, Seoul. (I.P.O. Box 1975). WTD in prep.

35690—SWITZERLAND — All kinds of industrial tools, machinery, toolroom accessories, jacks. Im-Hof & Co. (importer, dist.), Schuetzenmattstrasse 27, 4000-Basel. WTD in prep.

Office, computing machines

35720—LEBANON — Typewriters, parts. Ets. V. & S. Minassian (importer, distribu-dist., agent), I.C.C. Bldg., 4th Fl., Debbas Sq., P.O. Box 6817, Beirut. WTD 9/70.

35731—LEBANON — Electronic calculators. Ets. V. & S. Minassian (importer, dist., agent), I.C.C. Bldg., 4th Fl., Debbas Sq., P.O. Box 6817, Beirut. WTD 9/70.

35731 — SWITZERLAND — Compact computers. Macom AG (importer, distributor, agent), Englischviertelstr. 59, 8032-Zurich. WTD in prep.

35733—FINLAND — Minicomputers, attachments. Elektroniikkayhtyma Oy, Rolf Lilja, Man. Dir. (dist., agent), Heikkilantie 2, Helsinki 20. WTD 10/70.

35733 — SWITZERLAND — Electronic data processing peripherals, accessories, discs, tapes, drives, paper tape readers, collecting stations and machines, as well as software, commercial programs. Data Center Luzern AG (importer, dist.), Attn: E. Erb, Mgr., Pilatusstrasse 60, 6000-Luzern. WTD in prep.

35733—SWITZERLAND — EDP peripherals. Macom AG (importer, distributor, agent), Englischviertelstr. 59, 8032-Zurich. WTD in prep.

35741—LEBANON—Electric calculators. Ets. V. & S. Minassian (importer, distributor, agent), I.C.C. Bldg., 4th Fl., Debbas Sq., P.O. Box 6817, Beirut. WTD 9/70.

35790—SWITZERLAND — Novelty office and business systems, such as addressing systems, identification equipment, including embossers and sorters; list maintenance systems; mimeographers; small office offset machines and platemarkers. Sadrag (distributor, mfr.), Attn: Alfred Jacob, Man. Dir., 4633-Laeufelfingen. WTD in prep.

35791—AUSTRIA—Letter folding, stuffing, sealing machines. Correspondence requested in German. Georg Sailer, Handel mit graphischen Maschinen (importer, dist., retailer), P.O. Box 59, A-1211 Vienna. WTD 4/70.

Service industry machines

35852—HONG KONG — Air conditioners—domestic, commercial, industrial. Hunter Corp., Ltd. (distributor), 102 Takshing House, P.O. Box 1821, Hong Kong. WTD in prep.

35892—IRELAND — Sewage treatment plant. Harwood Industrial Services Ltd. (importer, retailer), 51 Waterloo Lane, Waterloo Rd., Dublin 4. WTD 8/70.

Machinery

35990—AUSTRIA — High-pressure hose of all types. Exclusive agency. Intertechno, Import/Export Handelsges mbH, (importer, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

Electric transmission, distribution equipment

36112 — SWITZERLAND — Potentiometers; wire, trimmer, precision. H. C. Summerer AG (importer, dist.), Soneggstrasse 74, 8006-Zurich. WTD in prep.

36113—PAKISTAN—Industrial and laboratory instruments. Requests catalogs, quotations c. & f. Karachi. Alif Instrument & Furnace Co. (agent), IV/A-8/3, Nazimabad, Karachi. WTD 8/70.

Electrical industrial apparatus

36292—AUSTRIA—Automotive semiconductor battery chargers; 220 v, 50 cycles. Exclusive agency. Intertechno, Import/Export Handelsges mbH (importer, agent, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

Electric lighting, wiring equipment

36430 — SWITZERLAND — Integrated connectors for electronics. H. C. Summerer AG (importer, dist.), Soneggstrasse 74, 8006-Zurich. WTD in prep.

Radio, television receiving sets

36514—SWITZERLAND—Video recorders, professional audio-visual equipment, hi-fi equipment. I. Weinberger (importer, dist.), Attn: Alexander E. Weinberger, 110 Foerrlibuckstrasse, 8005-Zurich. WTD in prep.

36520 — IRELAND — Master tapes fully recorded ready for replication by purchaser on disc or tape. Trend Studios Ltd. (importer, distributor), 10 Hagan Ct., Lad Lane, Dublin 2. WTD 8/70.

Communication equipment

36622—SWITZERLAND — Closed circuit television equipment. I. Weinberger (importer, dist.), Attn.: Alexander E. Weinberger, 110 Foerrlibuckstrasse, 8005-Zurich. WTD in prep.

Electronic components, accessories

36742 — SWITZERLAND — Transistors, double transistors. H. C. Summerer AG (importer, dist.), Soneggstrasse 74, 8006-Zurich. WTD in prep.

36743 — SWITZERLAND — Diodes, high potential diodes, bridge rectifiers. H. C. Summerer AG (importer, dist.), Soneggstrasse 74, 8006-Zurich. WTD in prep.

36790—IRELAND—Audio visual teaching aids. Modern Teaching Ltd. (importer, distributor, agent), 23 Westland Row, Dublin 2. WTD 8/70.

36792—GERMANY — Polycarbonate capacitors for industrial use. Industrial Electronics GmbH (imp., agent), 14 Klueberstr., 6000 Frankfurt/Main. WTD 9/70.

36792 — SWITZERLAND — Condensers (capacitors for electronic applications), tantal, electrolytic, metal, plastic, paper, ceramic, mica, carbon. H. C. Summerer AG (importer, dist.), Soneggstrasse 74, 8006-Zurich. WTD in prep.

36793—SWITZERLAND—Resistors, wire, ceramic, carbon, miniature. H. C. Summerer AG (importer, dist.), Soneggstrasse 74, 8006-Zurich. WTD in prep.

36795 — SWITZERLAND — Thyristors; triacs; wire, trimmer and precision potentiometers; integrated connectors; diacs. H. C. Summerer AG (importer, dist.), Soneggstrasse 74, 8006-Zurich. WTD in prep.

Motor vehicles, motor vehicle equipment

37141 — COLOMBIA — Spare parts for autos. Motores & Repuestos Ltda., Motorep (importer, distributor), Calle 6, Bis No. 24-00, Apartado Aereo 15139, Bogota. WTD 9/70.

Aircraft, parts

37224—LUXEMBOURG — Light aircraft and/or general aviation parts. Exclusive European or regional sales agent. Metropolitan Airmotive Inc. (importer, agent), l'Aiglon, rue P. Federspiel, Luxembourg. WTD 11/69.

Engineering, laboratory instruments

38112—PAKISTAN—Laboratory, scientific instruments. Requests catalogs, quotations, c. & f., Karachi. Alif Instrument & Furnace Co. (agent), IV/A-8/3, Nazimabad, Karachi. WTD 8/70.

38112 — SWITZERLAND — Electronic measuring & scientific instruments, all kinds. I. Weinberger (importer, dist.), Attn: Alexander E. Weinberger, 110 Foerrlibuckstrasse, 8005 Zurich. WTD in prep.

Instruments for measuring, controlling, indicating physical characteristics

38213—AUSTRIA—Automotive diagnostic instruments for use by repair, maintenance work shops. Exclusive agency. Intertechno, Import/Export Handelsges mbH (imp., agent, repairer), Riemergasse 11, A-1010 Vienna. WTD in prep.

38213—PAKISTAN — Industrial process control instruments. Requests catalogs, quotations, c. & f., Karachi. Alif Instrument & Furnace Co. (agent), IV/A-8/3, Nazimabad, Karachi. WTD 8/70.

38214 — SOUTH AFRICA — Spectrophotometers. Optolabor (Pty.) Ltd. (importer, distributor, agent), P.O. Box 31208, Braamfontein, Johannesburg. WTD 9/70.

Optical instruments, lenses

38311—IRELAND—Optical instruments, lenses. Micron Optical Co. (importer, distributor, agent), 12 Clonkeen Rd., Deansgrange, Co. Dublin. WTD 9/70.

Surgical, medical, dental instruments

38410—THAILAND—Anesthesia apparatus, oxygen tents. Requests catalogs, c.i.f. Bangkok prices. Bangkok Unitrade Co., Ltd. (importer, dist.), 292/18-19 Siam Square, Soi 4, P.O. Box 1819, Bangkok. WTD in prep.

38421—THAILAND—Respirators and apparatus. Requests catalogs, c.i.f. Bangkok prices. Bangkok Unitrade Co., Ltd. (dist.), 292/18-19 Siam Square, Soi 4, P.O. Box 1819, Bangkok. WTD in prep.

Photographic equipment, supplies

38611 — SWITZERLAND — Cameras, projectors, meters, still photographic equipment, accessories for science, industry. I. Weinberger (imp., dist.), Attn: Alexander E. Weinberger, 110 Foerrlibuckstrasse, 8005-Zurich. WTD in prep.

38612 — LEBANON — Photocopying machines. Ets. V. & S. Minassian (importer, dist., agent), I.C.C. Bldg., 4th Fl., Debbas Sq., P.O. Box 6817, Beirut. WTD 9/70.

38612 — SWITZERLAND — Office photocopiers; photocopying equipment coupled with novelty business systems. Sadrag (distributor, mfr.), Attn: Alfred Jacob, Man. Dir. 4633-Laufelfingen. WTD in prep.

38613 — SWITZERLAND — Cameras, projectors, all sizes; other motion picture equipment, accessories for science, industry. I. Weinberger (importer, dist.), Attn: Alexander E. Weinberger, 110 Foerrlibuckstrasse, 8005-Zurich. WTD in prep.

38614—SWITZERLAND — Microfilming equipment for science, industry. I. Weinberger (importer, dist.), Attn: Alexander E. Weinberger, 110 Foerrlibuckstrasse, 8005-Zurich. WTD in prep.

38616 — LEBANON — Sensitized photographic paper. Ets. V. & S. Minassian (importer, distributor, agent), I.C.C. Bldg., 4th Fl., Debbas Sq., P.O. Box 6817, Beirut. WTD 9/70.

Costume jewelry, notions

39610 — IRELAND — Ear rings, finger rings, hair slides. Novel Jewellery Ltd. (importer, distributor, mfr.), 54 Moore St., Dublin 1. WTD 6/70.

Other Foreign Official Tenders

ARGENTINA—The National Waterworks Dept. invites bids for the construction of an underground aqueduct linking the Bernal Water Treating Plant and Lanus Shunting Chamber. The official budget estimate is 44.8 million Argentine pesos (4 pesos=U.S.$1). Bid deadline is Nov. 27. Copies of conditions and specifications are available for 668.65 Argentine pesos from Obras Sanitarias del la Nacion, Division Compras, Marcelo T. de Alvear 1840, Buenos Aires, by asking for Expediente 60952-LP-1968. A set of the conditions in Spanish may be seen in Room 5611, Construction and Building Materials Div., U.S. Dept. of Commerce, Washington, D.C. 20230.

BURMA—Controller of Stores, Electricity Supply, issued Tender No. 50(T)/EL-ESB(E)/69-70 for the supply of towers and accessories for the 132 kv single unit circuit transmission lines. Copies of specifications are available for U.S. $6.60 by certified check from: Controller of Stores, Electricity Supply Board, Rose Bank, Rd., Ahlone, Rangoon.

FINLAND—The National Board of Public Roads & Waterways will solicit international bids for construction of a 22.4 km road north of Helsinki and paving 1,030 km of roadway at various locations. Estimated cost of both projects is $31.4 million: $21.4 million for the road, bridges and related roads, and $10 million for the paving projects. The projects are contingent upon the granting of a World Bank loan. The portion of the road under consideration will extend from Tattariharju to Jarvenpaa, running eventually to Lahti. It will involve 22.4 km of motorway, 36.2 km of other public roads, 11.4 km of private roads, and 42 bridges. The hot-mix paving projects will provide for the laying of about 1,030 km (8 million sq. meters) of asphalt concrete, gravel asphalt concrete and base course bituminous concrete. Work is to be carried out between May 15 and October 15, 1971. Applications for pre-qualification are due Oct. 30. Write: M. Niskala, Dir. Gen., The National Board of Public Roads & Waterways, E. Esplanaadikatu 4, Helsinki 13. Telex Helsinki 12-589. Copies of two documents providing information relative to the prequalification of contractors for these projects are available from BDC-645, U.S. Dept. of Commerce, Washington, D.C. 20230 (202-967-3602).

INDIA—Bombay importer desires to become agent for medical, scientific and industrial instruments including: hospital and laboratory instruments, material testing equipment, food testers, pharmaceutical, chemical and cosmetic preparations. Contact J. T. Jagtiani, National House, Tulloch Rd., Apollo Bunder, P.O. Box 332, Bombay 1. WTD 7/70.

ISRAEL—A three- to four-year program of highway construction is planned comprising a $25 million urban expressway in the Tel Aviv metropolitan area (See INTERNATIONAL COMMERCE, Mar. 30, p. 35.), and a $50 million series of interurban road projects. Israel has applied for a World Bank loan. Construction will begin in early 1971. For prequalification documents and pre-bidding information which should be returned by Oct. 31, write Department of Public Works, P.O. Box 20101, Tel Aviv. Copies of the announcement, which provides additional information on the projects, are available from BDC-645, U.S. Dept. of Commerce, Washington, D.C. 20230 (202-967-3602).

IVORY COAST—SEPRIC, research firm for promotion of the coffee industry at Abidjan, plans to build coffee plant which will begin operating by October 1972. The firm also seeks the services of a consulting engineering organization to perform a feasibility study and eventually assist in preparing the tender and advising SEPRIC during the construction of the plant, which will be located in the interior of the country and will have the following features: receiving station for dry coffee beans (500 tons per day); pulping, stocking, cleaning, measuring, colorimetric separation and export bagging facilities; with annual capacity of 40,000 tons of dry coffee beans or 20,000 tons of green coffee. Similar plants will probably be built in the future. Write in French to: Monsieur le Directeur de la SEPRIC, Boite Postale 21165, Abidjan.

KUWAIT—Ministry of Public Works announced Oct. 31, as the closing date for registration for participation in tenders related to the Mubarak Al-Kabir Hospital Project. Registration is restricted to local contractors in Categories I and II (approved for projects over 1 million Kuwaiti dinars or 500,000 Kuwaiti dinars, respectively) having a foreign partner approved by the Ministry of Public Works. A draft for the regulation of relations between local and foreign partners is available for study at the Ministry's Office of Liaison. Companies registering with the Liaison Officer should furnish a) letter confirming company's desire to register; b) statement giving names of local partners, names and nationalities of foreign contractors suggested for participation with local contractor, draft agreement intended to be concluded between local and foreign contractors, capital of company intended to be established, names of partners authorized to sign for company (official agreement authenticated by notary public of Kuwait should be submitted with offers), and c) following information about foreign partners, submitted in English: name, nationality, date of registration and registered address, articles of incorporation, registered and operating capital, list of major projects carried out during the last 10 years valued in excess of U.S. $5.6 million, technical and administrative staff, and equipment/machinery in possession of company and location of such equipment/machinery.

NEW ZEALAND—The Director General, Stores Div., Post Office Headquarters, has issued Tender No. P.O.H.Q. 171/1251 for the supply of microwave equipment. Bid deadline Nov. 13. Bids should offer 960 channel microwave equipment, 300 channel microwave equipment and microwave radio antennae, waveguide and pressurizing equipment. Copies of the announcement and specifications are available from: Director General, Stores Div., Post Office Headquarters, Wellington, or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-643, Room 4209, U.S. Dept. of Commerce, Washington, D.C. 20230 ★(202-967-4823).

PAKISTAN—Sui Northern Gas Pipelines Ltd. invites applications from contractors to prequalify for bidding on a proposed extension of a high pressure natural gas pipeline composed of approximately 50 miles of 10″ diameter pipe, 98 miles of 8″ diameter pipe, and 30 miles of 6″ diameter pipe. Work is expected to begin in May and must be completed by December 1971. Contractors having done similar works valued at $2 million or more and wishing to prequalify for this project should send particulars of works in the past five years, details of available personnel and equipment, and an audited copy of a recent balance sheet to: Managing Director, Sui Northern Gas Pipelines Ltd., P.O. Box 56, Lahore, Punjab, West Pakistan. Application must be received by Oct. 22.

PAKISTAN—Sui Northern Gas Pipelines Ltd. invites prequalifications for a tender on construction of two suspended pipeline crossings (of overall approximate lengths of 2,200 feet and 1,300 feet,

respectively, over the Indus and Kabul Rivers). Work consists of foundations and erection of prefabricated materials supplied by the company consisting of 150 tons of structural steel works, main and subsidiary rope work, and about 3,500 feet (total) of suspended 10" and 8" pipeline. Construction should begin in January 1971. Contractors should send particulars of similar work completed in the past five years, details of available personnel and equipment, and an audited copy of a recent balance sheet to the Managing Director, Sui Northern Gas Pipelines Ltd., P.O. Box 56, Lahore, West Pakistan; a copy of the application with all enclosures should be sent to Freeman Fox & Ptr., 25 Victoria St., London S.W.1, England. Deadline is Oct. 16.

SOUTH AFRICA—The Capetown City Council extended the bid deadline on Tender No. Q70/30-"GM" for automatic traffic signal control equipment from Oct. 23 to Nov. 27.

TRINIDAD & TOBAGO—Prequalifiers to bid on a World Bank education project consisting of the construction of 16 junior secondary schools, three senior secondary schools, extensions to three senior secondary schools and one teachers training college for a total floor area of 1.4 million square feet are sought. Bids are to be submitted in 5 subphases. Applications for prequalification, due Oct. 24, are to be addressed to the Project Unit, Ministry of Works, Standard Life Bldg., Corner Independence Sq. & Edward St., or P.O. Box 386, Port of Spain, Trinidad.

VENEZUELA — Government-owned TV station, Channel 5, announced plans to build five repeater stations at various locations. The program will start in January 1971. Congress has already approved Bs 5,772,000 for this purpose (U.S. $1= 4.50 bolivars). The black and white station will probably incorporate some basic color equipment. Write: Dr. Andres Sucre, President, Televisora Nacional, Cerro Marian, Caracas.

Future Construction Abroad

To alert U.S. firms to potential exports in foreign construction and expansion projects, U.S. Foreign Service Officers report as soon as possible project preliminary plans and progress.

AUSTRALIA—Lend Lease Development Pty. Ltd. requested the Sydney City Council to assume a small parcel of private property in downtown Sydney to make way for **a A$100 million building project.** Proposed development includes: 860 ft. tower building over a pedestrian plaza; "low-rise" buildings on parts of the perimeter of the plaza; shopping arcades; parking space and tunnels connecting with the Martin Place railway station now being constructed; and an 816 bedroom hotel containing a 2,000 capacity ballroom.

AUSTRALIA—Approval is expected for **a A$15 million plan to add to the Port of Darwin,** Northern Territory. Exports through the Port of Darwin for last year totaled more than 1½ million tons, of which approx. 1 million tons consisted of iron ore. Developments being planned will provide facilities for up to 120 small ships, 600 ft. long deepwater berth, and bulk loading facilities at East Arm, a port with 60 ft. of water at zero tide—sufficient to take vessels of 100,000 tons or more.

COSTA RICA—The Government of Costa Rica and the World Bank are negotiating for a $17.8 million loan for design and construction of **a new port at Cieneguita** near Limon. Overall costs are estimated at $27.2 million with Costa Rica providing the balance. A project feasibility study has been completed by TAMS-DYPSA, a consortium of U.S.-Costa Rican engineering firms. Copies of the study may be obtained from DYPSA, Apartado 2528, San Jose, Costa Rica, with authorization of the Ministry of Transport. Firms may also contact TAMS, 375 Park Ave., New York, N.Y. 10022. Following release of the study, Costa Rica will solicit submission of prequalifications by engineering firms for design of the port.

FRANCE—**An increase in capacity of the South European Pipeline,** requested by the owner, Societe du Pipe-Line Sud European (S.P.L.S.E.) in May, has been authorized. The capacity will be raised from 34.4 to 90 million tons/year and the project will cost around 900 million francs and run from Fos-sur-Mer to Lyon and Fos to Strasbourg. Work is to begin in early 1971 and last 18 months. Because of the increased capacity as well as the increasing capacities of tankers, the storage facilities will be increased from 1,760,000 m^3 to 3 million m^3. Contact S.P.L.S.E., 195 Ave. de Neuilly, Neuilly-sur-Seine.

FRANCE—The Societe D'Etudes Du Metropolitain De L'Agglomeration Lyonnaise (SEMALY) seeks proposals as soon as possible from American consortia for a **complete transport process system** for subways between Lyon and Marseille, including civil engineering, site engineering, systems development, all rolling stock, traction motors, rails and design, all on a turnkey basis. Contact SEMALY, Grand Palais De La Foire, Quaiachille/Lgnon, Lyon 69, Attn: Jean Mollard.

VENEZUELA—The Venezuelan Congress approved the Public Credit Law giving the State Petroleum Corp (CVP) authority to borrow Bs 270,674,000 (Bs=U.S.-$0.222) for financing the following projects in 1970-71: **gas pipeline,** Anaco to Puerto Ordaz, Bs. 57,210,000; **gas-gathering pipeline** in Lake Maracaibo, Bs. 118,735,000; **development of the Mata-Acema oil field** in Monagas State, Bs. 29,489,000; **development of the North Oritupano oil field** in Anzoategui State, Bs. 45,000,000 and **development of the Mingo oil field** in Barinas State, Bs. 20,240,000. Investment in the above projects will total more than Bs. 338.8 million with the difference financed through CVP and Government of Venezuelan contributions. The CVP expansion program presents export opportunities for drilling equipment and services, as well as for underwater valves, connectors, couplings and associated hardware Further information is available from: Jefe, Depto, Proyectos y Construcciones, Corporacion Venezolana del Petroleo, Edif. Selemar, Calle Real de Sabana Grande, Apartado 14057, Caracas.

Visiting Buyers And Officials

FRANCE—Maurice Descude and 25-30 members of Cold Rollers Mission, European Committee of Section Rollers, 31 Ave. Montaigne, Paris 8e, **interested in visiting cold rolled steel sheet section plants for technical and economic discussions on utilization in building industry and in conferences with appropriate institutes.** Oct. 17 via New York for 2 weeks. c/o The E. F. MacDonald Travel Co., Tour America Div., 1180 Ave. of the Americas, New York. Itinerary: New York; New Haven; Youngstown & Cleveland, Ohio; St. Louis; Kansas City; Milwaukee; Wayne, Mich. WTD 7/70.

ISRAEL—Iosef Friedman, Gen. Mgr. & Oded Barak, Prod. Mgr., T.A.G. Regional Fruit Packing Center, Kiryat Shmona, Upper Galilee; and Isaac Adler, Mgr. of Kibbutz Bar-Am, Upper Galilee, **interested in purchasing packing and marketing machinery and equipment for apples and pears.** Oct. 22-25 via New York for 2-3 weeks. c/o Israel Consulate Gen., Commercial Dept., 11 E. 70th St., N.Y. 10021. Itinerary: New York, Lansing, East Coast cities. WTD in preparation.

KOREA—Rhee, Yun Chin, Mgr. Dir., Dong-Ah Construction Industrial Partnership Co., Ltd., 24-3, 1-ka, Chungmu-ro, Chung-Ku, Seoul, **interested in licensing agreement, joint venture on manufacturing spark plugs.** Sept. 28 via Las Angeles for 1 mo. c/o 3822 Milan Dr., No. 4, Alexandria, Va. 22305. Itinerary: Los Angeles, Detroit, Washington, Toledo. WTD 2/69.

LUXEMBOURG—Jean Scholer, Happy Snacks S.A., P.O. Box 2103 Luxembourg (Wimpy), **interested in importing restaurant catering equipment by representation and/or licensing agreements.** End of Oct. via Miami for 3 weeks. c/o Jack Wagner, 7180 Plantation Rd., Plantation, Fla. 33313. Itinerary: Miami, Chicago, New York. WTD in preparation.

NETHERLANDS—J. L. Schmidt, C. N. Schmidt N.V., 8 Jan Rebelstraat, Amsterdam, **interested in acquiring exclusive distributorship for the Netherlands for chemical, pharmaceutical and plastic raw materials.** Approx. Oct. 16 via New York for 3 weeks. c/o Chase Manhattan Bank, 1 Chase Manhattan Plaza, New York, N.Y. 10005. Itinerary: New York, Chicago, St. Louis, Washington, D.C. WTD 10/67 under revision.

NEW ZEALAND— K. W. E. Tyrrell, Manager, Import Div., NMA Co. of N.Z. Ltd., P.O. Box 930, Dunedin, **interested in obtaining agencies or representation for average to above average qualities of textile products:** household linen (terry towels, table cloths, dish towels, bedspreads, table mats), furnishing fabrics of synthetic or natural fibers, upholstery fabrics and drapes, mattress ticking, yarns and fibers of synthetic, polypropylene, natural for industrial use, carpet backing, nonwoven bonded fabrics, apparel fabrics of natural and man-made fiber. Oct. 22-24 via New York for 2 weeks. c/o Geo. Boukouris & Co., 80 Broad St., New York, N.Y. 10004. Itinerary: New York, Boston, Los Angeles or San Francisco, will alter schedule. WTD in preparation.

International Business Reports

Export Directory of the Blue Book of Europe. **European Export-Directory, Gothenburg. 1,853 pp. $30.**

The name, address and telephone number of over 90,000 European companies are listed alphabetically by product, country and name in this directory. Information is also included on EEC, ECSC, EURATOM, EFTA, OECD, GATT and COMECON. Text is presented in English and German, with the index also in French, Portuguese, Spanish, Swedish, Italian, Danish, Norwegian, Russian and Finnish.

Write: International Publications Service, 303 Park Ave. South, New York, N.Y. 10010.

Port of Detroit Directory. **Published by Greater Detroit Chamber of Commerce and Port of Detroit Operators Assn. 18 pp. Free.**

Lists banks with foreign trade departments, freight forwarders, customhouse brokers, export packaging companies, bonded public warehouses, general cargo terminals, railroads, common motor carriers, ocean freight agents, and foreign consular offices in Detroit.

Write: Greater Detroit Chamber of Commerce, 150 Michigan Ave., Detroit, Mich. 48226, or Port of Detroit Operators Assn., P.O. Box 1643, Detroit, Mich. 48231.

Foreign Trade Statistics of Asia and the Far East. **United Nations. New York. 151 pp. $3.**

The data in this volume of foreign trade statistics of Asia cover the period 1964-67. The information was supplied to the Economic Commission for Asia and the Far East from magnetic tapes of the International Computing Center of the United Nations. Provided are: a summary of statistical codes in broad economic categories; a full description of classification by broad economic categories and the formula used for splitting SITC items or subgroups into more than one broad economic category. Tables cover: total imports and exports by countries of provenance and destination; imports and exports by section of SITC; imports and exports by groups of SITC; trade balance of ECAFE countries with the world; intraregional trade balance; trade balance of ECAFE countries with other ECAFE countries and principal regions of the world.

Write: Sales Section, United Nations, New York, N.Y. 10017. (Order Vol. V, Ser. B, No. 1.)

Turkish Trade Directory, 1970. **(4th ed.) Costante Basin Ajansi, Istanbul. 40 pp. $15.**

This trade directory lists business and professional firms and individuals throughout Turkey. Entries are alphabetic by headings which describe the products and services offered. Also provided is a listing of Chambers of Commerce and industry, consulates, embassies and legations, public departments and trade commissioners.

Write: International Publications Service, 303 Park Ave. South, New York, N.Y. 10010

Calendar For World Traders

Oct. 21 & 28, & Nov. 4—Darien, Conn.—Seminars on export insurance, documentation and shipping, State Nat'l Bank of Conn.

Oct. 22—Baltimore—Latin American trade opportunities conference, Belvedere Hotel. Sponsors: World Trade Assn. of Baltimore, Field Office.

Oct. 22 & 29—Norwalk, Conn.—Export seminars on commercial banks and export carriers, Union Trust Co.

Oct. 26 & Nov. 2—Jacksonville—Export trade seminars on Commerce Dept. Services, and avoiding red tape, Chamber of Commerce Board Room.

Oct. 27—Seattle—Seminar on banking and insurance for exporters, Commerce Field Office, 10 a.m.

Oct. 27 & Nov. 3—Atlanta—Export Trade Workshop, Georgia State U., 6:30 p.m.

Oct. 27—Nashville—Symposium on int'l trade & finance, Third National Bank.

Oct. 27 & Nov. 3—Minneapolis—Export seminars on Commerce Dept. services and handling the export order, Commerce Field Office, 2 p.m. Minnesota World Trade Assn.

Oct. 27-29—Norfolk—22nd annual Virginia Conference on World Trade, Golden Triangle Motel.

Oct. 28—Milledgeville, Ga.—Middle Georgia Exportential Conference, Old Governor's Mansion. Sponsors: Georgia College, Atlanta REEC, Field Office.

Oct. 28—Middletown, Ohio—Joint meeting of Cincinnati and Dayton World Trade organizations.

Oct. 28 & Nov. 4—Cincinnati—Annual export trade workshop, U. of Cincinnati. Sponsors: World Trade Club and Field Office.

Oct. 28—Newark—Profits in Exports meeting, SBA Office, 970 Broad St.

Oct. 28 — Wichita — Export Documentation Workshop, Chamber of Commerce, 2 p.m.

Oct. 29-30 — Point Clear, Ala. — Eighth Annual Meeting of Alabama Export Council, Grand Hotel.

Nov. 1—Amsterdam, Neth.—Visit USA World Tourism Seminar at Nov. 1-6 World Congress of Am. Society of Travel Agents.

Nov. 3—Memphis—Export workshop on Taiwan, Sheraton-Peabody Hotel. Sponsor: Mid-South Exporters' Roundtable.

New Publications

When ordering any publication indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.

OFFICE OF THE SECRETARY

Directory of private programs assisting minority business. May 1970. 372 pp. $2.50. This publication identifies the type of private assistance available for minority business enterprises and provides information covering activities currently underway, together with specialized Federal Government and existing municipally-sponsored programs.

BUREAU OF DOMESTIC COMMERCE

Miscellaneous Publication

The metal-cutting tool industry 1965-1969. August 1970. 16 pp. 25¢. Includes data on product coverage, industry composition, trends in types of tools produced, materials consumption, and more.

Periodical

Construction review. Monthly industry report. August 1970. Vol. 16, No. 8. Annual subscription $6.50 ($1.75 additional for foreign mailing). Single copy, 55¢.
Articles in this issue include:
- Construction's input-output profile
- Eximbank's new policies will aid construction firms.

BUREAU OF INTERNATIONAL COMMERCE

Foreign Economic Trends

Annual subscription $15 ($6 additional for foreign mailing). Single copy, 10¢.
Algeria (ET 70-79). July 20, 1970. 16 pp.
Cameroon (ET 70-80). July 20, 1970. 16 pp.
Chad (ET 70-89). August 24, 1970. 12 pp.
Dominican Republic (ET 70-88). August 1970. 12 pp.
Ethiopia (ET 70-90). Aug. 25, 1970.[1] 12 pp.
Morocco (ET 70-92). Aug. 28, 1970.[1] 12 pp.
New Zealand (ET 70-93). Aug. 1970.[1] 16 pp.
South Africa (ET 70-87). August 1970. 12 pp.
United Kingdom (ET 70-96). Sept. 1, 1970.[1] 8 pp.
Venezuela (ET 70-91). Aug. 25, 1970.[1] 8 pp.

International Marketing Information Service

Exhibitor's Export Market Guide

Australia offers growing market for U.S. printing and bookbinding equipment (IMIS 70-40). September 1970. 4 pp. 10¢.
United Kingdom, fast growing market for business and industrial training aids (IMIS 70-42). September 1970. 4 pp. 10¢.
Growing market for chromatographic, spectroscopic instruments in Germany (IMIS 70-44). September 1970. 8 pp. 10¢.
Outlook is good for U.S. instrumentation exporters in fast-growing German market. (IMIS 70-45). September 1970. 4 pp. 10¢.
Italy offers expanding market for electromechanical precision parts (IMIS 70-46). September 1970. 8 pp. 10¢.
Heating, refrigeration, air conditioning market up in Japan for U.S. exporters (IMIS 70-47). September 1970. 4 pp. 10¢.

Country Market Survey

Country market survey—Spain. August 1970. 72 pp. $1. This study provides U.S. businessmen with detailed information on sales possibilities. The market for U.S. products, competition, basic data on the economy, selling channels, and tariff and trade regulations are discussed.

Overseas Business Reports

Annual subscription $16 ($5 additional for foreign mailing). Single copy 15¢, unless otherwise indicated.
Basic data on the economy of Australia (OBR 70-34). July 1970. Supersedes OBR 63-43. 28 pp.
Establishing a business in Mexico (OBR 70-41). August 1970. Supersedes OBR 68-43. 28 pp.

Periodical

International Commerce. October 5, 1970. Vol. 76, No. 33. Single issue 40¢.
Articles in this issue include:
- More than 140 countries' import rules summarized
- Monthly report on steps affecting world trade summarizes actions by Congress, Treasury, Tariff Commission, others
- African hospital construction expands rapidly
- United Kingdom seeks inflation cure
- Competitive position of U.S. in Pakistan slips
- Taiwan economy expands rapidly.

Trade Lists

Listings of foreign business firms, classified under approximately 75 commodity and service groups, are used in locating sales outlets, sources of supply, direct market survey, etc. The following are newly compiled; others are available. $1 each.
- American firms, subsidiaries and affiliates—Edinburgh, Scotland, Consular District
- American firms, subsidiaries and affiliates—Jamaica

BUREAU OF THE CENSUS

Construction and Housing

Construction Reports

Sales of new one-family homes: second quarter 1969 through second quarter 1970 (C25-70-Q2). Sept. 1970. Annual subscription (including monthly, quarterly, and annual reports) $3. Single copy prices: monthly, 10¢; quarterly, 25¢ and annual, $1.
Housing completions: May 1970 (C22-70-5). Sept. 1970. Annual subscription $1. Single copy, 10¢.
Housing authorized by building permits and public contracts July 1970 (C40-70-7). September 1970. Price: Series C40, Annual $11 ($2.75 additional for foreign mailing). Single copy (annual), $2.75; single copy (monthly), 70¢.

General Housing Characteristics

This advance report presents 1970 census statistics on selected housing characteristics for this State. Data are shown for the State, each standard metropolitan statistical area, each place of 10,000 inhabitants or more, and each county of comparable area.
Montana (HC(V1)-28). September 1970. 12 pp. 30¢.
1967 Census of Construction Industries
United States summary (CC67-1-1A). September 1970. Part A—statistics for all construction establishments. September 1970. 24 pp. 35¢.
United States summary (CC67-1-1B). Part B—statistics for construction establishments with payroll. September 1970. 28 pp. 35¢.

Current Housing Reports

Vacant housing units in the United States: second quarter 1970 (Series H-111, No. 61). September 1970. Annual subscription (Series H-111 and H-121, combined), $1.50 (50¢ additional for foreign mailing).

Housing Unit Counts for States—Preliminary Reports

Virginia (HC(P1)-48) revised. September 1970. 2 pp. 10¢.
Guam (HC(P1)-54). September 1970. 2 pp. 10¢.
American Samoa (HC(P1)-56). September 1970. 2 pp. 10¢.
Canal Zone (HC(P1)-57). September 1970. 2 pp. 10¢.

Distribution and Services

Current Reports

Weekly retail sales. Retail sales for week ended September 19, 1970 (CB 70-362). September 24, 1970. 2 pp. 10¢.

Special Current Business Report

Monthly department store sales in selected areas: July 1970 (BD-70-7). September 17, 1970. Annual subscription $1. Single copy, 10¢.

[1] Semi-Annual

1967 Census of Business

Selected Services—Subject Reports

Laundries, cleaning plants, and related services (BC67-SS3). August 1970. 96 pp. $1.25.

Selected Services—Change Sheets

The following area reports contain revised numbers which should be substituted for those contained in the originally issued report. Each revised report is dated September 1970.

Alabama (BC67-SA2).
California (BC67-SA6).
Delaware (BC67-SA9).
Georgia (BC67-SA12).
Indiana (BC67-SA16).
Kentucky (BC67-SA19).
Maryland (BC67-SA22).
Massachusetts (BC67-SA23).
Michigan (BC67-SA24).
Minnesota (BC67-SA25).
Mississippi (BC67-SA26).
Missouri (BC67-SA27).
Nebraska (BC67-SA29).
New Jersey (BC67-SA32).
New York (BC67-SA34).
Ohio (BC67-SA37).
Oklahoma (BC67-SA38).
Pennsylvania (BC67-SA40).
Rhode Island (BC67-SA41).
South Carolina (BC67-SA42).
South Dakota (BC67-SA43).
Tennessee (BC67-SA44).
Texas (BC67-SA45).
Utah (BC67-SA46).
Vermont (BC67-SA47).
Washington (BC67-49).
Wisconsin (BC67-SA51).
Wyoming (BC67-SA52).

Industry

Current Industrial Reports

Spun yarn production: 1969 (Series: MA-22F(69)-2). September 22, 1970. Price: 15¢ per copy—$1.50 per year.

Selected electronic associated products: 1968 (Series: MA-36N(68)-1). September 21, 1970. 16 pp. 25¢.

Population

Current Population Reports

Population Counts for Standard Metropolitan Statistical Areas—Preliminary Reports

Each of the following reports is dated September 1970, contains two pages and is priced at 10¢:

Akron, Ohio (PC(P2)-2).
Canton, Ohio (PC(P2)-33).
Cincinnati, Ohio-Ky.-Ind. (PC(P2)-41).
Cleveland, Ohio (PC(P2)-42).
Columbus, Ohio (PC(P2)-46).
Dayton, Ohio (PC(P2)-50).
Detroit, Mich. (PC(P2)-54).
Hamilton-Middletown, Ohio (PC(P2)-80).
Huntington-Ashland, W. Va.-Ky.-Ohio (PC(P2)-85).
Lima, Ohio (PC(P2)-108).
Lorain-Elyria, Ohio (PC(P2)-111).
Mansfield, Ohio (PC(P2)-120).
Springfield, Ohio (PC(P2)-196).
Steubenville-Weirton, Ohio-W. Va. (PC(P2)-199).
Toledo, Ohio-Mich. (PC(P2)-207).
Wheeling, W. Va.-Ohio (PC(P2)-222).
Youngstown-Warren, Ohio (PC(P2)-230).

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Environmental Data Service

Periodical

Monthly weather review. September 1970. Vol. 98, No. 9. Annual subscription $7.50 ($2 additional for foreign mailing). Single copy, 65¢. Articles in this issue include:

A new statistical method of estimating surface radiances from corresponding satellite window-channel radiances
On the use of SIRS data in stratospheric synoptic analysis
A circularly symmetric primitive equation model of tropical cyclone development containing an explicit water vapor cycle
Picture of the Month—ITOS views
Computational stability and time truncation of coupled nonlinear equations with exact solutions
Optimum influence radii for interpolation with the method of successive corrections
The weather and circulation of June 1970—a month with sharp temperature variations, warm in the northwest and cool in the southeast.

Coast and Geodetic Survey

Publications List

Coast and Geodetic Survey list of frequently used world and U.S. maps and related publications. July 1970. 4 pp. Free upon request.

Tidal Tables

Tidal current tables: 1971. Pacific Coast of North America and Asia. 1970. 260 pp. $2. Order from Coast and Geodetic Survey or its agents.

Weather Bureau

Marine Weather Services Chart

Mexican Border to Point Conception, Calif. April 1970. Not to be used for navigation. 12″ x 19″. 15¢.

Manasquan, N.J. to Cape Hatteras, N.C. and Chesapeake Bay. June 1970. Not to be used for navigation. 12″ x 19″. 15¢.

Research Laboratories

Technical Reports

On the solar dynamo theory (ESSA TR ERL 173-ESL 8). July 1970. 36 pp. 25¢. This work contains a rough description of the basic mechanisms involved in the solar dynamo, and describes large-scale or secular velocity fields and the principal magnetic fields.

Exhaustive search for the best cyclic (20, 8) code (ESSA TR ERL 174-ITS 111). April 1970. 36 pp. 35¢. An exhaustive computer search for the best, simply implemented, cyclic (20, 8) codes was carried out, and the procedures and results are reported in this publication.

On the role of vertical neutral-gas motions in producing ion convergence at E-region heights (ESSA TR ERL 175-ITS 112). July 1970. 40 pp. 30¢. This paper deals with the role of vertical neutral-gas motions in producing ion convergence at E-region heights. The limited observations and theory suggest strongly that they are of sufficient amplitude to be important in the study of sporadic E.

Sources, losses, and transport of magnetospherically trapped particles (ESSA TR ERL 180-SDL 16). August 1970. 116 pp. $1. Trapping, pseudo-trapping, and non-trapping regions within an observed magnetospheric configuration are described. Time averaged proton and electron distributions and available data concerning the alpha particle distribution with the trapping and pseudo-trapping regions are presented.

NATIONAL BUREAU OF STANDARDS

Periodical

Physics and chemistry—Section A of the Journal of Research of the National Bureau of Standards. July-August 1970. Vol. 74A, No. 4. Annual subscription $9.50 ($2.25 additional for foreign mailing). Single copy $2. Articles in this issue include:

Effect of oxide additions on the polymorphism of tantalum pentoxide II. "Stabilization" of the high temperature structure type
Effect of oxide additions on the polymorphism of tantalum pentoxide III. "Stabilization" of the low temperature structure type
The dissociation constant of m-nitroanilinium ion in water-tetrahydrofuran solvents at 25° C.
Specific heats of fluorine at coexistence
A literature survey of the chemistry of flame inhibition
The NBS Alloy Data Center: description of index to the literature.

Technical news bulletin. September 1970. Vol. 54, No. 9. Annual subscription $3 ($1 additional for foreign mailing). Single copy, 30¢. Articles in this issue include:

The psychophysical side of sound
NBS provides random tables for use in draft lottery
Improved semiconductor resistivity measurements
Separation of polymer molecules by flow
Measurement analysis program in mass
Standards and calibration
Hazardous noise levels in computer labs.

NATIONAL TECHNICAL INFORMATION SERVICE

Order the following reports on Government-sponsored research from: National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Make check or money order payable to National Technical Information Service. Price for each document is $3 (microfiche 65¢), unless otherwise specified.

Management Control, Decision Systems

Corporate finance model source fortran program cards (PB-193 594). Dept. of Transportation, Washington, D.C., March 1970, punched cards $9. Punched cards for a computer program designed for present worth and cash flow analysis. The model can be used to analyze government programs and other public ventures and to test the sensitivity of return on investment to interest and tax rates, investment credit, depreciation method and other variables. Also available: PB-190 673—Corporate Finance Model (previously announced) 67 pp. Documents the computer program.

The selection of improvement programs of intercity highways (CH-SAM-929). Charles River Associates, Inc., Cambridge, Mass., for the Dept. of Transportation, Dec. 1969, 31 pp. Describes and comments on methods used by state governments to select improvement projects on rural portions of the Federal Aid Primary and Secondary Highway Systems. Budgeting and project selection are discussed.

Sanitation and Pollution

Study of cost of sulphur oxide and particulate control using solvent refined coal (CH-SAM-925). General Technologies Corp., Reston, Va., for the National Air Pollution Control Admin., Apr. 1970, 72 pp. Cost analysis study of the use of solvent refined coal in combustion units as a means of pollution control for stack emissions.

☆ U. S. GOVERNMENT PRINTING OFFICE 1970—432-026/9

Commerce Department Directory

Commerce Building, 14th Street and Constitution Avenue, Washington, D.C. 20230, Phone STerling 3-9200

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Robert M. Smalley, Special Assistant to the Secretary

Richard P. Whitney, Assistant to the Secretary

ROCCO C. SICILIANO, Under Secretary of Commerce

Hudson B. Drake, Deputy Under Secretary

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MYRON TRIBUS, Assistant Secretary for Science and Technology

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JAMES T. LYNN, General Counsel

William E. Murane, Deputy General Counsel

FIELD OFFICES

ALBUQUERQUE, N.MEX., 87101, U.S. Courthouse. Area Code 505, 843-2386.

ANCHORAGE, ALASKA, 99501, 412 Hill Bldg., 632 Sixth Ave. Area Code 907, 272-6531.

ATLANTA, GA. 30303, Room 400, 75 Forsyth St., NW. Area Code 404, 526-6000.

BALTIMORE, MD., 21202, 305 U.S. Customhouse, Gay and Lombard Sts. Area Code 301, 962-3560.

BIRMINGHAM, ALA., 35205, Suite 200-201, 908 S. 20th St. Area Code 205, 325-3327.

BOSTON, MASS., 02203, Room 510, John Fitzgerald Kennedy Federal Bldg. Area Code 617, 223-2312.

BUFFALO, N.Y., 14203, 504 Federal Bldg., 117 Ellicott St. Area Code 716, 842-3208.

CHARLESTON, S.C., 29403, Federal Bldg., Suite 631, 334 Meeting St. Area Code 803, 577-4171.

CHARLESTON, W.VA., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. Area Code 304, 343-6181 Ext. 375 and 376.

CHEYENNE, WYO., 82001, 6022 O'Mahoney Federal Center, 2120 Capitol Ave. Area Code 307, 778-2220 Ext. 2151.

CHICAGO, ILL., 60604, 1486 New Federal Bldg., 219 S. Dearborn St. Area Code 312, 353-4400.

CINCINNATI, OHIO, 45202, 8028 Federal Office Bldg., 550 Main St. Area Code 513, 684-2944.

CLEVELAND, OHIO, 44114, Room 600, 666 Euclid Ave. Area Code 216, 522-4750.

DALLAS, TEX., 75202, Room 1200, 1114 Commerce St. Area Code 214, 749-3287.

DENVER, COLO., 80202, Room 161 New Customhouse, 19th and Stout Sts. Area Code 303, 837-3246.

DES MOINES, IOWA, 50309, 609 Federal Bldg., 210 Walnut St. Area Code 515, 284-4222.

DETROIT, MICH., 48226, 445 Federal Bldg. Area Code 313, 226-6088.

GREENSBORO, N.C., 27402, 258 Federal Bldg., W. Market St. P.O. Box 1950. Area Code 919, 275-9111.

HARTFORD, CONN. 06103, Room 610-B, Federal Office Bldg., 450 Main St. Area Code 203, 244-3530.

HONOLULU, HAWAII, 96813, 286 Alexander Young Bldg., 1015 Bishop St. Area Code 808, 546-5977.

HOUSTON, TEX., 77002, 1017 Old Federal Bldg., 201 Fannin St. Area Code 713, 226-4231

JACKSONVILLE, FLA., 32202, P.O. Box 35087, 400 W. Bay St. Area Code 904, 791-2796.

KANSAS CITY, MO., 64106, Room 1840, 601 E. 12th St. Area Code 816, 374-3141.

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MILWAUKEE, WIS., 53203, Straus Bldg., 238 W. Wisconsin Ave. Area Code 414, 272-8600.

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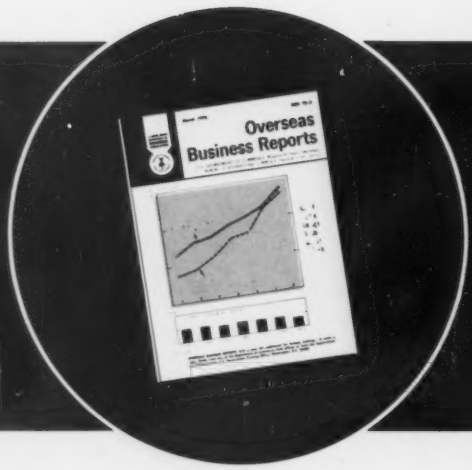

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